CONTENTS OF SUPPLEMENT.

PERSONAL 203
Obituary 203
ENGINEERING SOCIETIES 203
Coming Technical Meetings 203
NEW PUBLICATIONS 204
Trade Publications 204
CONSTRUCTION NEWS:
Condensed List of Contracts Pending 204
Railways 205
Street and Electric Railways 205
Electric Light and Power 205
Bridges 206
Buildings 206
Water-Works 206
Sewerage 207
Garbage Disposal and Street Cleaning 208
Streets and Roads 208
Manufacturing Plants 208
Gas Plants 208
Miscellaneous Contracts 208
Contract Prices 209, 210
INDUSTRIAL NOTES 209

PERSONAL.

Mr. Philip Prioleau has been appointed City Engineer of Jacksonville, Fla.

Mr. Edward W. Pendleton has been appointed a Water Commissioner of Detroit, Mich.

Mr. W. A. McFarland, Superintendent of the Water-Works of Washington and Georgetown, D. C., has resigned.

Mr. Albert E. Beals, Jun. M. Am. Soc. M. E., of Norwich, N. Y., was married Nov. 17 to Miss Grace Hindge, of Baldwinsville, N. Y.

Mr. Frank Iten, Superintendent of Water-Works, Fort Wayne, Ind., has ceased to hold that position, owing to the abolition of the office.

Mr. Albert T. Mabrey, of Philadelphia, Pa., has been appointed Chief Engineer of the Electric Light & Water Department of Smyrna, Del., to succeed Mr. Frank L. Wright, resigned.

Mr. J. L. Allison, civil engineer, has opened an office at 1207 Claus Spreckels Building, San Francisco, Cal., and will carry on a general engineering practice, especially in water supply, water power and foundation work.

Capt. Frederick Rodgers, U. S. Navy, has been appointed President of the Board of Inspection and Survey, Navy Department, to succeed Commodore Dewey, who is relieved to take command of the Asiatic Squadron.

Mr. George A. True, who for many years has been the Chief Engineer of the Whiting Foundry Equipment Co., of Chicago and Harvey, Ill., has resigned his position and has associated himself with the Frontier Iron Works, Detroit, Mich.

Mr. J. A. L. Waddell, M. Am. Soc. C. E., of Kansas City, Mo., has been appointed Consulting Engineer of the Boston Elevated R. R., and Mr. George A. Kimball, M. Am. Soc. C. E., Exchange Building, Boston, has been appointed Chief Engineer.

Mr. William H. Hall, M. Am. Soc. C. E., formerly State Engineer of California, has just returned to his home in San Francisco, after a long professional visit to the Transvaal, Cape Colony, Orange Free State, Bechuanaland and Rhodesia, South Africa.

Mr. William C. Bullitt, Traffic Manager of the Norfolk & Western Ry., with headquarters at Roanoke, Va., has resigned. The vacancy will not be filled at once, but Mr. J. M. Barr, Vice-President and General Manager, will have general control of the Traffic Department.

Mr. George W. Fuller, civil engineer, has been appointed Superintendent of the experimental filtration beds of the new water-works at Cincinnati, O. He was employed to make similar experiments for the State Board of Health of Massachusetts and also for the city of Louisville, Ky.

Dr. Geo. H. Johnson, who for several years was engaged in editorial work in the office of the Mississippi River Commission, St. Louis, Mo., is now on the staff of "The Financier," of New York city. He has just compiled and published a supplement on "The Trust Companies of Greater New York."

Mr. Justus Eck, Engineer for Messrs. Lang, Wharton & Downs, electrical and contracting engineers, of London, England, is at present in this country visiting leading machinery manufacturers and electrical concerns with a view to increasing trade relations during the coming year. He will return to England about Dec. 15.

Mr. Jose Sanchez Ramos, President of the San Rafael Paper Mills and an officer of the Amecameca R. R., of the City of Mexico, is in New York city for the purpose of making purchases for both the companies with which he is connected. He will close contracts shortly for electrical equipment for the mills and will buy a quantity of rolling stock and track materials for the railway. His address is the Imperial Hotel.

President McKinley has directed that the two batteries of 10-inch guns on Staten Island, near Fort Wadsworth, New York, now designated as the Clifton and Ravenna Batteries, together with any adjacent defenses yet to be built, be known hereafter as "Fort Newton," in honor of the late Gen. John Newton, Chief of Engineers, U. S. Army, who for many years was in charge of the works in New York Harbor.

Mr. C. Kadono, Chief Assistant Engineer of Construction, Sanyo Ry., with headquarters at Hiroshima, Japan, has resigned to accept the office of Manager of the London branch office of Messrs. Okura & Co., importers, Tokyo, and will probably sail for England, by way of the United States, early next year. As the firm is anxious to import some American steel and machinery, Mr. Kadono will spend some time in this country on his way to England.

Mr. Francis Stuart Williamson, M. Am. Soc. C. E., civil and mechanical engineer, of New York city, has been appointed by Gen. C. H. T. Collis, Commissioner of Public Works, as the engineer to prepare plans and estimates for a viaduct over the Manhattanville valley, New York city, for the continuation northward of Riverside Drive. The viaduct will extend from 127th to 135th Sts., and the cost is not to exceed $5,000,000, which will be covered by an issue of bonds.

Mr. E. Fisher has been appointed General Superintendent of the Toronto, Hamilton & Buffalo Ry., with office at Hamilton, Ont., to succeed Mr. R. H. L'Hommedieu, resigned. The offices of Division Superintendent, Assistant Superintendent, Superintendent of Telegraph, General Car Agent, Superintendent of Motive Power and Equipment and Purchasing Agent have been abolished, and the duties pertaining to these offices will hereafter be performed by or under the direction of the General Superintendent.

Mr. Robert A. Cummings, Assoc. M. Am. Soc. C. E., of Philadelphia, Pa., has removed his offices from 326 Walnut St. to 715 Girard Building, Broad and Chestnut Sts., in that city. He has been engaged as Consulting Engineer for the Houston Construction Co., of Philadelphia, and will also retain his similar position with Messrs. J. H. Dialogue & Son, steamship builders, of Camden, N. J., where he is superintending the construction of two steel floating grain elevators and also various improvements to their works, including a 500-ft. dry dock, wharves and manufacturing plant.

Lieut. Robert E. Peary, U. S. Navy, the famous Arctic explorer, sailed on the "Lucania," Nov. 27, for London, where he will deliver a lecture, Dec. 6, before the Royal Geographical Society, and later one before the Scottish Geographical Society, at Edinburgh. After the latter lecture he will go to Dundee, Peterhead and Aberdeen to select a vessel from among the whaling fleet which will be used for his next expedition to the Arctic, leaving New York probably the latter part of next July, to be gone from two to five years. On this expedition he will establish a colony at Sherard Osborne, about 82° lat. and thence travel northward by land and across the sea ice toward the Pole. The cost of the trip for the five years will be from $100,000 to $150,000.

OBITUARY.

Mr. Robert M. Steel, contractor, died at St. Johns, Mich., Nov. 16.

Mr. William F. Kuhn, civil engineer, of Johnstown, Pa., died recently.

Mr. Samuel Mills, contractor, of Cincinnati, O., died Nov. 24, aged 49.

Mr. Gilbert De Huff, civil engineer, of Lebanon, Pa., died Nov. 24, aged 59.

Mr. Thomas W. Wright, civil engineer and surveyor, of Santa Cruz, Cal., died Nov. 15.

Mr. Silas N. Havens, contractor and dealer in builders' supplies, of New Brighton (S. I.), N. Y., died Nov. 23, aged 70.

Mr. William H. Perry, President of the Board of Sewer Commissioners of Port Richmond (S. I.), N. Y., died Nov. 23, aged 51.

Mr. Charles P. Ryther, senior member of the firm of Ryther & Pringle, founders and machinists, of Carthage, N. Y., died Nov. 22, aged 64.

Mr. William H. Flaville, President of the Board of Health, Chester, Pa., died Nov 26, aged 70. He was formerly City Surveyor of that place.

Mr. William B. Fasig, Superintendent of the Columbia Water Co., Columbia, Pa., for 33 years, died Nov. 23 at his home in that place.

Mr. F. W. Tabrum, civil engineer, of Pittsburg, Pa., died recently in Costa Rica, Central America, of yellow fever. He was a native of England, was 35 years of age, and had formerly been employed on the Erie & Central New York R. R., at Cortland, N. Y.

Dr. A. J. De Rossett, who died recently at Wilmington, N. C., is said to have been the oldest railway director in the United States, having been connected with the Wilmington & Weldon Division of the Atlantic Coast Line in that capacity for 55 years consecutively.

Mr. Patrick Shields, for five or six years Superintendent for Mr. Thomas S. Sutherland, boiler maker, Green Island, Troy, N. Y., was killed in a boiler explosion, Nov. 23, at the Graves Elevator Works, Rochester, N. Y., while inspecting the boiler in his official capacity as a representative of the Hartford Steam Boiler Inspection & Insurance Co., Hartford, Conn.

Mr. Aretas Blood, President of the Manchester Locomotive Works, Manchester, N. H., died at his home, in that city, Nov. 24, aged 81. He was born in Weathersfield, Vt., and in 1853, with Mr. Oliver W. Bailey, established the Manchester Locomotive Works. In 1872 he acquired control of the manufacture of the Amoskeag steam fire engines. The first piece of horseless fire apparatus is said to have been built under the direction of Mr. Blood. He was President of the Ames Mfg. Co., Chicopee, Mass.; the Manchester Cotton & Woolen Mills, and the Amoskeag Paper Mills, Manchester, N. H., and the Columbia Cotton Mills, Columbia, S. C. He was also Director of several New England railways, some of which he was instrumental in building.

Col. John Laing, civil engineer, died at Baltimore, Md., Nov. 26, aged 80. He was born in Edinburgh, Scotland, and received the degree of civil engineer from the College of Royal Engineers, Chatham, England. He entered the British Army as an engineer and won distinction by his services during the Crimean War. He left the service with the rank of Lieutenant-Colonel and then filled positions as Chief Engineer of Birmingham and other cities of England. He surveyed a number of railway lines in that country and then went to South America where he was Chief Engineer and Superintendent of Construction of several railway systems in Brazil. In 1867 he came to Baltimore, Md., and surveyed the route of the Western Maryland R. R. over the Blue Ridge Mountains. As Chief Engineer of the Union R. R. Co. he built the Pennsylvania R. R. tunnels under the city of Baltimore. Three years ago he retired from active work save for occasional practice as consulting engineer.

Mr. Ernest August Schneider, Engineer in Charge of the drawing room of the Bridge and Construction Department of the Pencoyd Iron Works, died at Philadelphia, Pa., Nov. 14, after a brief attack of peritonitis, caused by appendicitis. He was a younger brother of Mr. C. C. Schneider, M. Am. Soc. C. E., and was born in Apolda, near Weimar, Saxony, Germany, Aug. 31, 1851. He came to this country when about 20 years of age, and was for a number of years connected with the old Delaware Bridge Co. and later with the Union Bridge Co., Athens, Pa., representing them at Edge Moor and other works, where many important plans passed through his hands, amongst them the Rockville bridge at Harrisburg, Pa., of 26 spans, where he introduced the use of U-nuts. In 1878 he took charge of the New York office, but was transferred to Trenton, N. J., in 1880, returning to New York again in 1883. Notable among the bridges with which Mr. Schneider was connected about this time was the Niagara cantilever, designed by his brother, Mr. C. C. Schneider, and the Hawkesbury bridge, in Australia, the cutting shoe for the caisson of the latter being designed by him, as were the details. In 1886 he assumed charge of the drawing room of the Bridge and Construction Department of the Pencoyd Iron Works, a position which he filled until his death with faithfulness and success, the force having grown from half a dozen to between 70 and 80 men. The drawings for over 2,000 bridges and buildings have passed through that office during this time, conspicuous among them being a part of the Memphis cantilever, designed by Mr. Geo. S. Morison, M. Am. Soc. C. E.; the Pennsylvania R. R. train sheds at Jersey City, N. J., and Philadelphia; the Delaware River bridge on the same road; the Manhattan Life Insurance Building, New York city; the Land Title & Trust Building, Philadelphia, and the new Niagara arch bridge, now in course of construction, from the designs of Mr. L. L. Buck, M. Am. Soc. C. E. As a detailer Mr. Schneider was very ingenious, and many improvements can be traced to him. He made a special study of the design of the machinery for drawbridges and turntables, and a very large number of structures of this class have passed through his hands with great success.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS.
Nov. 30, Dec. 3. Annual Convention in New York city. Secy., F. R. Hutton, 12 West 31st St., New York city.

FRANKLIN INSTITUTE.
Dec. 3. "The Tools of the American Pioneer," H. C. Mercer. Dec. 8.—"Fatigue of Metal in Iron and Steel Forgings," H. F. J. Porter. Secy., Wm. H. Wahl, 15 South Seventh St., Philadelphia, Pa.

ENGINEERS' CLUB OF PHILADELPHIA.
Dec. 4. Secy., L. F. Rondinella, 1122 Girard St., Philadelphia, Pa.

ENGINEERS' SOCIETY OF WESTERN NEW YORK.
Dec. 6. Secy., Henry Vier, Library Bldg., Buffalo, N. Y.

CIVIL ENGINEERS' SOCIETY OF ST. PAUL.
Dec. 6. C. L. Annan, City Engineers' Office, St. Paul, Minn.

CIVIL ENGINEERS' CLUB OF CLEVELAND.
Dec. 7. Secy., F. A. Coburn, Case Library Bldg., Cleveland, O.

DENVER SOCIETY OF CIVIL ENGINEERS.
Dec. 7. Secy., Walter Pearl, 36 Jacobson Bldg., Denver, Colo.

COLUMBIAN ENGINEERING SOCIETY.
Dec. 7. Secy., F. W. Hart, 15th and H Sts., N. W., Washington, D. C.

NEW ENGLAND WATER-WORKS ASSOCIATION.
Dec. 8. Lunch at Young's Hotel at 1 p. m., followed by three papers at Headquarters, Tremont Temple, Boston. Secy., J. C. Whitney, Newton, Mass.

NEW ENGLAND RAILROAD CLUB.
Dec. 8. Secy., Edward L. Jones, P. O. Box 1158, Boston, Mass.

ENGINEERS' AND ARCHITECTS' CLUB OF LOUISVILLE.
Dec. 9. Secy., Pierce Butler, 16 Norton Bldg., Louisville, Ky.

CANADIAN SOCIETY OF CIVIL ENGINEERS.
Dec. 9. Secy., C. H. McLeod, 112 Mansfield St., Montreal.

ENGINEERING ASSOCIATION OF THE SOUTH.
Dec. 9. L. P. Brown, Nashville, Tenn.

NORTHWESTERN TRACK AND BRIDGE ASSOCIATION.
Dec. 10. Secy., D. W. Meeker, St. Paul, Minn.

ST. LOUIS RAILWAY CLUB.
Dec. 10. Secy., H. H. Roberts, 511 Commercial Bldg., St. Louis, Mo.
THE NEW JERSEY SANITARY ASSOCIATION.
Dec. 10-11. Annual Meeting at Lakewood, N. J. Secy., James A. Exton, Arlington, N. J.
MONTANA SOCIETY OF ENGINEERS.
Dec. 11. Albert S. Howey, Helena, Mont.
INDIANAPOLIS ENGINEERING CLUB.
Dec. 11. Secy., Edson F. Folsom, Indianapolis, Ind.
ENGINEERS' CLUB OF KANSAS CITY.
Dec. 13. Secy., F. W. Tuttle, Baird Bldg., Kansas City, Mo.
NORTHWEST RAILWAY CLUB.
Dec. 14. Secy., T. A. Foque, Soo Line, Minneapolis, Minn.
WISCONSIN POLYTECHNIC SOCIETY.
Dec. 14. Secy., W. K. Means, Loan & Trust Building, Milwaukee, Wis.
WESTERN FOUNDRYMEN'S ASSOCIATION.
Dec. 15. Secy., A. Sorge, Jr., 1020 Monadnock Block, Chicago, Ill.
ENGINEERS' AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.
Dec. 15. Secy., Frank H. Olmstead, Los Angeles, Cal.
BOSTON SOCIETY OF CIVIL ENGINEERS.
Dec. 15. Secy., S. E. Tinkham, City Hall, Boston, Mass.
AMERICAN SOCIETY OF CIVIL ENGINEERS.
Dec. 15. "Rope Driving," T. Spencer Miller. Secy., C. W. Hunt, 127 E. 23rd St., New York city.
ENGINEERS' CLUB OF ST. LOUIS.
Dec. 15. Secy., Richard McCulloch, St. Louis, Mo.
SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.
Dec. 16. Secy., F. A. Charpiot, Macon, Ga.
NEW YORK RAILROAD CLUB.
Dec. 16. Secy., W. W. Wheatly, 168 Montague St., Brooklyn, N. Y.
ENGINEERS' CLUB OF CINCINNATI.
Dec. 16. Secy., J. F. Wilson, P. O. Box 333, Cincinnati, O.
ENGINEERS' CLUB OF COLUMBUS.
Dec. 18. Secy., M. S. Hopkins, 14½ N. High St., Columbus, O.
TECHNICAL CLUB OF OMAHA.
Dec. 20. Secy., J. Harry Lawrie, Omaha, Neb.
ENGINEERS' CLUB OF MINNEAPOLIS.
Dec. 20. Secy., Elbert Nexsen, 1620 S. E. 4th St., Minneapolis, Minn.
ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA.
Dec. 21. Secy., R. A. Fessenden, 410 Penn Ave., Pittsburg, Pa.
WESTERN RAILWAY CLUB.
Dec. 21. Secy., F. M. Whyte, 225 Dearborn St., Chicago, Ill.

AMERICAN SOCIETY OF NAVAL ENGINEERS.—The annual meeting will be held at Washington, D. C., Jan. 7 and 8. Mr. F. C. Bieg is Secretary and Treasurer of the Society.

MICHIGAN ENGINEERING SOCIETY.—The 19th annual convention will be held at Port Huron, Dec. 28 to 30. Reports are expected from standing committees on Electric Street Railway Franchises; Forestry; The Relation of Sewerage and Water Supply to the Public Health; and Material for Street Paving.

ANMERICAN INSTITUTE OF MINING ENGINEERS.—The 74th meeting of the Institute will be held at Atlantic City, N. J., beginning on Feb. 15, 1898. Further information regarding the meeting may be obtained later on by addressing the Secretary, R. W. Raymond, 13 Burling Slip, New York city. A meeting in Mexico is proposed for October, 1898.

AMERICAN FORESTRY ASSOCIATION.—The annual meeting for the election of officers and transaction of business will be held on Wednesday, Dec. 8, 1897, at 10 a. m., in the hall of the Cosmos Club, 1518 H St., N. W., Washington, D. C. This will be the 16th annual meeting of the association and the second after incorporation. It is the expectation that the time will be devoted exclusively to the business of the association, such as the receiving of reports and election of officers. Other matters in the nature of papers or discussions will be referred to a later meeting, probably to be held in Florida.

F. H. Newell, Cor. Secy.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS.—The annual meeting of the American Society of Mechanical Engineers began on Tuesday evening, Nov. 30, at the society's headquarters, No. 12 West 31st St., New York city. The members began arriving during the afternoon, and an informal conversational reception was held in the parlor and smoking room until 9 p. m., when the meeting was called to order. The retiring President of the society, Mr. Worcester R. Warner, of Cleveland, O., delivered his presidential address, taking for his subject "The Evolution of the Telescope." He illustrated it with stereopticon views of the famous telescopes and observatories of the world, including the great Lick and Yerkes observatories and their apparatus. At the close of the lecture the informal reception was continued in the rooms until a late hour. More than 200 members and guests have already registered, and the meeting promises to be one of the largest the society has ever held. The report of the proceedings of the remaining sessions will be given in our next issue.

ENGINEERS' CLUB OF ST. LOUIS.—The club met on Nov. 18, with President Flad in the chair. Twenty-six members and one visitor were present.

Prof. J. B. Johnson made an address on "The Results of a Recent Investigation of the Relative Strength of Wooden Beams and Columns in Large and Small Sizes." This investigation was conducted at the testing laboratory of Washington University for the government forestry division. The large beams were of selected lumber, and were tested green. They were 18 to 24 ft. in length, and were 8 × 12 ins. in section. Eight small beams, 5 ft. long and 4 ins. sq. in cross section, were made out of each large beam after it was broken. The beams were of oak, white pine, short leaf pine and long leaf pine. Tests were also made on large pine beams, which had been taken out of the Exposition building after 13 years of service. The average of these tests showed that the large beams had 92% of the strength of the small ones, and that the apparent elastic limit in the large beams was 97½% of that of the small ones. Large columns showed a strength of 75% of small columns.

Richard McCulloch, Secretary.

NEW PUBLICATIONS.

BULLETIN OF THE DEPARTMENT OF LABOR, No. 13, November, 1897.—Edited by Carroll D. Wright, Commissioner, and Owen W. Weaver, Chief Clerk, Washington. Government Printing Office. Paper; 9 × 5¾ ins.; pp. 189-843.

Contents: The Italians in Chicago; The Anthracite Mine Laborers; Digest of Recent Reports of State Bureaus of Labor Statistics; Manufactures in Massachusetts; Recent Foreign Statistical Publications; Court Decisions Affecting Labor; State Laws Relating to Labor, enacted since Jan. 1, 1896; Recent Government Contracts.

BOLETIN DE AGRICULTURA, MINERIA E INDUSTRIAS, publicado por la Secretaria de Fomento, Colonizacion e Industria de la Republica Mexicana, Ano VI., Num. 9. Marzo de 1897. Mexico, 1897. Paper; 8½ × 6 ins.; pp. 200. For gratuitous distribution by the Secretaria de Fomento, City of Mexico.

This bulletin treats of the following subjects: Insects injurious to coffee plants and the means of destroying them; history of the destruction by fire of the San Amaro mine, in Zacatecas; statistics of the movement of minerals in 1897, by states and properties; the making of vinegar from honey; notes on the general industries of Mexico; observations upon the volcano of Colima; general meteorological resume for March, 1897.

PROCEEDINGS OF THE PURDUE SOCIETY OF CIVIL ENGINEERING, 1897.—Purdue University, Lafayette, Ind. A. H. Aldinger, Managing Editor. Paper; 8¾ × 5¾ ins.; pp. 109; 50 cts.

Contents: Past and Present Tendencies in Engineering Education, Prof. Mansfield Merriman; Designs for Railway Bridges, Onward Bates, M. Am. Soc. C. E., M. Inst. C. E.; The Comptometer, Prof. Fred. Morley; The Old National Bridge Over the White River at Richmond, Ind.; Laying Out Sewer Work, Prof. W. K. Hatt; Stream Gagings, C. T. Johnson; Double Track Construction, Illinois Central Ry., H. R. Safford; Vertical and Horizontal Angles in Photo-Surveying, Prof. Fred. Morley; Moduli of Elasticity for Compound Stress, Prof. W. K. Hatt; A Graphic Solution of Trusses, Prof. Fred. Morley; Editorials.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3 1-2 x 6 ins.; 6 x 9 ins., and 9 x 12 ins.)

ELECTRIC TRUCKS.—Peckham Truck Co., Kingston, N. Y. Pamph.; 7¾ × 15½ ins.; pp. 48; illustrated.

This is a supplement to catalogue "D," and includes trucks intended for cable or electric cars. In all some 19 trucks designed for high speed suburban traffic or slow speed city service are illustrated and described. A number of attachments or special devices are included, among which may be mentioned Millen's patent gravity brake, Excelsior sand box, Eureka track scraper, etc.

CAMP CONDUIT.—H. B. Camp Co., Aultman, O. Pamph.; 6 × 9 ins.; pp. 62.

This is an illustrated list of the various styles and types of subsurface and interior conduits manufactured under the trade name of "Camp." The first part is devoted to a description of the requirements of underground conduits, the effects of electrolysis, letters from users and a form of specifications, contracts and bond for construction of conduits. The latter part describes an interior conduit system.

BLOWERS, HOT-BLAST HEATING APPARATUS AND ENGINES.—National Blower Works, Milwaukee, Wis. Paper; 6¾ × 8 ins.; pp. 38.

This is a catalogue and price list of blowing and exhausting fans driven by belting or directly coupled to steam engines. The fans are of various types, for different classes of work, and are fitted with self-oiling journal boxes. Blast regulating gates, pipes and elbows, collecting hoods, and other supplies are manufactured, as well as steam traps for hot-blast heating apparatus. Horizontal and vertical engines, and a double reciprocating square piston engine are built for driving the fans. Among the firm's specialties are kilns for drying lumber and other materials, and the Paine-Ellis drier for grain, malt, etc., in which narrow vertical chambers filled with grain alternate with air chambers, the air being forced through by means of a fan and kept at any desired temperature by a steam coil in the housing of the fan.

BOILERS, TANKS, CHIMNEYS, ETC.—S. Freeman & Sons Mfg. Co., Racine, Wis. Paper; 5¼ × 7¾ ins.; pp. 112.

This is a catalogue of the various patterns of horizontal and vertical boilers manufactured by the company for power and heating purposes, and includes also steam-jacketed kettles, steel and wooden tanks, standpipes, steel chimneys, etc. Among the specialties illustrated is an intake elbow for the Duluth water-works, built of ⅜-in. steel, the diameter of inlet being 78 ins., and that of the main pipe 60 ins. There is also a standpipe for the South Milwaukee water-works, and a smokestack 8 ft. diameter and 175 ft. high, built for the Calumet Electric Ry., of Chicago. About 45 pages are devoted to tables and useful information, including the government rules for steam pressures for boilers and furnaces, heating surface of tubes, capacities of boilers for heating purposes, capacities of tanks, and a number of handy rules.

STEAM SHOVELS AND WRECKING CARS, DREDGES, BALLAST UNLOADERS, ETC.—The Marion Steam Shovel Co., Marion, O. Morocco; flexible cover, oblong, 9 × 6 ins.; pp. 172; illustrated.

This handsome catalogue will find a place in the library of many an engineer and contractor on account of the numerous full-page engravings (half-tones and wood cuts), showing the various machines built by this company in actual operation on railway, canal, mining, irrigation and other large engineering works in different parts of the country, including the Chicago drainage canal, the Minnesota open-cut iron ore mines, and placer-mining in the south. There are also plans and sections showing the design and arrangement of the machinery.

The machines include the well-known Barnhart steam shovels and wrecking cars, the Barnhart ballast unloader, the Barnhart and King ditching machines, and steam dredges for ditch, canal, river and harbor work. Among the special machines is a back-acting steam shovel, with the bucket cutting towards instead of away from the car, and some of these machines are shown at work on phosphate rock excavations. The illustrations are accompanied by tables of dimensions and capacities, and particulars of the work done by the various machines, and there are numerous testimonials, together with lists of users of the machines.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News.
Dec. 2.	Cribwork bulkhead	New York, N. Y.	Nov. 25
Dec. 2.	Bulkhead wall	Brooklyn, N. Y.	Nov. 25
	Advertised, Engineering News, Nov. 25.		
Dec. 2.	Pipe sewers	Brooklyn, N. Y.	Nov. 25
Dec. 3.	Iron cage	Landsdowne, Pa.	Nov. 18
	Advertised, Engineering News, Nov. 18.		
Dec. 3.	Street bonds ($35,687)	Norwood, O.	Nov. 11
Dec. 4.	Plans for town hall	Cardiff, Wales	Sept. 16
Dec. 4.	Gas franchise	Palo Alto, Cal.	Oct. 28
Dec. 4.	School building plans	Brooklyn, N. Y.	Nov. 11
Dec. 4.	Railway station	Buenos Ayres, Argentine	Nov. 18
Dec. 4.	Sewer	Evansville, Ind.	Nov. 18
Dec. 4.	Earth excavation	Pierson Station, Ill.	Nov. 25
Dec. 5.	Tunnel (450 ft.)	Helena, Mont.	Nov. 25
Dec. 6.	Illuminating gas	New York, N. Y.	Nov. 25
Dec. 6.	Laying sidewalks	Wilkes-Barre, Pa.	Nov. 25
Dec. 6.	Paving	Toledo, O.	Nov. 11
Dec. 6.	Remodeling jail	Magnolia, Miss.	Oct. 28
Dec. 6.	Boilers and engines (2)	Huntsville, Ala.	Dec. 2
Dec. 6.	Vapor lights	Indianapolis, Ind.	Dec. 2
Dec. 6.	School building	New York, N. Y.	Dec. 2
Dec. 6.	Steel bridge	Buckingham, Va.	Dec. 2
Dec. 6.	Road entrance	Stoneham, Mass.	Dec. 2
Dec. 6.	Macadamizing	Brooklyn, N. Y.	Dec. 2
Dec. 6.	Pipe sewer	Montclair, N. J.	Dec. 2
Dec. 6.	Hook & ladder truck, etc.	Baltimore, Md.	Dec. 2
Dec. 7.	Heating and ventilating	Brooklyn, N. Y.	Dec. 2
Dec. 7.	Laundry Building	Binghamton, N. Y.	Dec. 2
Dec. 7.	Water-works franchise	Hoquaim, Wash.	Dec. 2
Dec. 7.	Asphalt paving	Brooklyn, N. Y.	Dec. 2
Dec. 7.	Water franchise	Craiova, Roumania	Oct. 1
Dec. 7.	Paving	Shamoken, Pa.	Nov. 4
Dec. 7.	Building repairs	Preston, Ga.	Nov. 25
Dec. 7.	Bridge bonds ($5,000)	Springfield, O.	Nov. 25
Dec. 7.	Laying water pipe	New Britain, Conn.	Nov. 25
	Advertised, Eng. News, Nov. 25 and Dec. 2.		
Dec. 7.	Water pipe (10,000 ft.)	Oroville, Cal.	Nov. 25
Dec. 7.	Pipe sewers	Mount Vernon, N. Y.	Nov. 25
Dec. 7.	Patrol wagon	Erie, Pa.	Nov. 25
Dec. 8.	Grading and paving	Cincinnati, O.	Nov. 18
Dec. 8.	Repairing bridge	Waterville, O.	Nov. 18
Dec. 8.	Cleaning catchbasins	Cleveland, O.	Dec. 2
Dec. 8.	Street lamp furnishings	Cleveland, O.	Dec. 2
Dec. 8.	Stone road	Camden, N. J.	Dec. 2
Dec. 8.	Garbage disposal plant, etc.	Boston	Dec. 2
Dec. 8.	Sewer pipe (65,000 ft.)	Providence, R. I.	Dec. 2
Dec. 8.	Paving brick	Providence, R. I.	Dec. 2
Dec. 8.	Grading	Buffalo, N. Y.	Dec. 2
Dec. 9.	Filtration tanks (19)	Cincinnati, O.	Dec. 2
Dec. 9.	Main sewers, etc.	Brooklyn, N. Y.	Dec. 2
Dec. 9.	Gravel roads	Vevay, Ind.	Dec. 2
Dec. 9.	Shore road	Brooklyn, N. Y.	Dec. 2
	Advertised, Engineering News, Dec. 2.		
Dec. 9.	Grading, etc.	Baltimore, Md.	Dec. 2
Dec. 9.	Supplies	Toronto, Ont.	Nov. 25
Dec. 10.	Electric light plant	Cumberland, Md.	Nov. 25
Dec. 10.	Interior bldg work	Washington, D. C.	Nov. 25
Dec. 10.	Stone, Gray's Harbor	Wash.	Nov. 18
	Advertised, Eng. News, Nov. 18 to Dec. 2.		
Dec. 10.	Building repairs	New York, N. Y.	Dec. 2
Dec. 10.	Repairing fire engines	New York, N. Y.	Dec. 2
Dec. 10.	Electric light bonds	La Grange, Mo.	Dec. 2
Dec. 10.	Fire engine house	Lancaster, O.	Dec. 2
Dec. 10.	Ship repairs	New York, N. Y.	Dec. 2
Dec. 11.	Sewer	Ashtabula, O.	Dec. 2
	Advertised, Engineering News, Dec. 2.		
Dec. 11.	Retaining wall	Cincinnati, O.	Nov. 25
Dec. 13.	Dredging	Montgomery, Ala.	Nov. 25
	Advertised, Eng. News, Nov. 25 to Dec. 9.		
Dec. 13.	Electric light franchise	Somerset, Ky.	Oct. 7
	Advertised, Eng. News, Oct. 7 to 21.		
Dec. 13.	Court house bonds	Grant City, Mo.	Dec. 2
Dec. 13.	Stone walk	Montclair, N. J.	Dec. 2
Dec. 13.	Laying water pipe	Lebanon, Pa.	Dec. 2
Dec. 14.	Church building	Portsmouth, Va.	Dec. 2
Dec. 14.	Steel bridge	Olivet, S. Dak.	Dec. 2
Dec. 14.	Bridge substructure	Birmingham, Pa.	Dec. 2
Dec. 14.	Brick and pipe sewers	St. Louis, Mo.	Dec. 2
Dec. 14.	Brick paving	Waukesha, Wis.	Nov. 11
Dec. 15.	Brick building	Hartford City, Ind.	Nov. 18
Dec. 15.	Improving grounds	Charleston, S. C.	Dec. 2
	Advertised, Eng. News, Dec. 2 and 9.		
Dec. 15.	Plumbing and painting	Hoboken, N. J.	Dec. 2
Dec. 16.	Repair of streets	Cincinnati, O.	Nov. 25
Dec. 16.	Street bonds	St. Bernard, O.	Nov. 25
Dec. 17.	Grading, etc.	Newport News, Va.	Dec. 2
Dec. 20.	Naphtha lights (175)	Binghamton, N. Y.	Dec. 2
	Advertised, Eng. News, Dec. 2 and 9.		
Dec. 20.	Wooden or steel bridge	Hardinsburg, Ky.	Dec. 2
Dec. 20.	Chains and clevises	Charleston, W. Va.	Nov. 25
	Advertised, Eng. News, Nov. 25 to Dec. 16.		

Dec. 20. Steam heating plant, Jamestown, N. Dak. . Dec. 2
Dec. 20. Bridge superstructures (5), Chicago, Ill. . Nov. 18
Advertised, Eng. News, Nov. 18 to Dec. 9.
Dec. 21. Building, Indianapolis, Ind. . . . . Dec. 2
Dec. 22. Machine shop, Key West, Fla. . . . . Dec. 2
Dec. 22. Grading and paving, Cincinnati, O. . . . . Dec. 2
Dec. 22. Cleaning paved streets, Cleveland, O. . . . . Dec. 2
Dec. 22. Bridge substructure, Chicago, Ill. . . . . Oct. 21
Advertised, Engineering News, Oct. 21.
Dec. 22. Bridges (3), Chicago, Ill. . . . . Nov. 11
Advertised, Eng. News, Nov. 11 to Dec. 2.
Dec. 23. Electric light plant, Fort Monroe, Va. . . . . Dec. 2
Advertised, Eng. News, Dec. 2 and 16.
Dec. 24. School building, Houston, Tex. . . . . Dec. 2
Dec. 27. Pipe sewers (3½ miles), Shelby, O. . . . . Dec. 2
Advertised, Eng. News, Dec. 2 and 9.
Dec. 27. Canal, Monterey, Mexico. . . . . Dec. 2
Dec. 27. Asphalt paving, Wabash, Ind. . . . . Dec. 2
Dec. 29. Superstructure, etc., Cincinnati, O. . . . . Dec. 2
Dec. 29. Bridge superstructure, Chicago, Ill. . . . . Nov. 4
Dec. 31. Railway concession, Brazil. . . . . Nov. 18
Dec. 31. Bridge, Valparaiso, Ind. . . . . Dec. 2
1898.
Jan. 5. Buoys, chain, etc., Tompkinsville, S.I., N.Y. . Nov. 11
Jan. 8. Plans for water-works, Belper, England. . Nov. 18
Jan. 10. Bridge approaches, Hot Springs, Ind. . . . Nov. 25
Jan. 10. Heating, etc., Rock Island, Ill. . . . . Nov. 25
Jan. 11. Steam propeller, Washington, D. C. . . . . Nov. 25
Feb. 10. Library, Pt. Elizabeth, Cape Good Hope. . Nov. 25
July 1. Water power, Madras, India. . . . . Oct. 28

RAILWAYS.

ATLANTIC & DANVILLE.—Reports state that an 8-mile branch line of this railway will be built to the copper mines of Granville county. At present the line extends from West Norfolk to Danville, Va., and with its several branches is 278 miles long. Chas. O. Haines, Gen. Mgr., Norfolk, Va.

BALTIMORE & OHIO.—During the past three months the maintenance of way department of this company has been busy laying the new 85-lb. steel rails ordered last summer by the receivers. Eight thousand tons have been put in the east-bound track on the 3d and 2d divisions and but four miles remain to be laid on the latter division; on the Parkersburg branch 3,000 tons have been placed in the track. There are still about 26,000 tons of rail to be delivered and it will be laid as rapidly as possible. With continued good weather rail will be laid all the winter, as the track was ballasted and new ties put in during the summer. W. T. Manning, Ch. Engr., Baltimore, Md.

CRIPPLE CREEK SHORT LINE.—This railway company was incorporated Nov. 17, with a capital stock of $1,500,000, to build a line from Colorado Springs to Cripple Creek, Colo., a distance of 39 miles. The incorporators and directors are: Wordman S. Eaton, Franklin D. Rogers and Herbert A. Clay, of Portland, Me.; John T. Franklin and Harry B. Stone, of Colorado Springs, Colo. The contractors are said to be McKutcheon & McKee.

DULUTH & IRON RANGE.—The directors of this company, Nov. 24, voted to increase the capital stock from $3,000,000 to $10,000,000. It is said that a part of the additional capital will be used to extend the line to the Rainy Lake gold regions. J. L. Greatsinger, Pres. and Gen. Mgr., Duluth, Minn.

ELDON & ST. LOUIS.—C. J. Du Bois, Ch. Engr., Macon, Mo., informs us that 132 miles of this road have been located and that location is now being made for 60 miles further. The right of way has been secured for 172 miles, and no contracts will be let until all the right of way has been secured. When complete the road will extend from Milton, Ia., to Mexico, Mo., a total distance of 272 miles. Pres., S. H. Sawyer, Eldon, Ia.

EL PASO & NORTHEASTERN.—We are informed that George S. Good & Co., Lock Haven, Pa., have received the contract for constructing this railway from El Paso, Tex., to White Oaks, N. Mex. This line projected some years ago as the White Oaks R. R. taps the coal fields 165 miles north of El Paso, and is being built by the New Mexico Railway & Coal Co., 66 Broadway, New York, N. Y. The "El Paso & Northeastern" Ry. Co. was incorporated in New Mexico, Oct. 22, with a capital stock of $3,700,000. Work on the road commenced last week. C. D. Simpson, Pres., Scranton, Pa.; J. L. Campbell, Ch. Engr., El Paso, Tex.

GRAND HAVEN & SOUTHEASTERN.—We are informed that this line is the 4-mile terminal of the Detroit, Toledo & Milwaukee R. R. All rights of way have been obtained, and the work is now under way. Pres., J. R. Megrue, Detroit, Mich.; Ch. Engr., C. H. Roser, Tecumseh, Mich.

GREENBRIER.—This company has been incorporated in West Virginia to construct a railway from a point on the Chesapeake & Ohio Ry. to the coal and lumber regions at the fork of the Greenbrier River in Greenbrier county, W. Va.; capital stock, $100,000. The incorporators are M. E. Ingalls, Pres. Chesapeake & Ohio Ry., Cincinnati; J. M. Gill and H. C. Sims, Huntington, W. Va.; Decatur Axtell, Richmond, Va.

JONESBORO, LAKE CITY & EASTERN.—C. V. Smith, Ch. Engr., Jonesboro, Ark., writes us that this line, from Nettleton to Lake City, Ark., a distance of 12 miles, is completed and in operation. Connection has been made with the Kansas City, Fort Scott & Memphis R. R. and the St. Louis, Iron Mountain & Southern Ry. at Nettleton. The preliminary surveys for the extension from Lake City to Osceola, on the Mississippi River, and from Nettleton to Jonesboro, will begin immediately. This line passes through the finest timbered lands in the state and through some excellent farming country.

KANSAS CITY, PITTSBURG & GULF.—Bernard Corrigan, of Kansas City, Mo., is said to have been awarded the contract for building a portion of this line from Redland, Ind. Ter., to Fort Smith, Ark., a distance of 15 miles.

MIDDLE TENNESSEE & ALABAMA.—Hunter McDonald, Ch. Engr. Nashville, Chattanooga & St. Louis Ry. Co., informs us that this railway was partially graded between Shelbyville, Tenn., and Fayetteville, Ala., when his company purchased the line. About 32 miles of track were laid south from Fayetteville, but nothing has been decided about its further extension. The track already laid is being put in condition for regular trains to be run about Feb. 1, 1898. Pres., J. W. Thomas, Martinsville, Tenn.

MOBILE & OHIO.—M. T. Lewmann & Co., Louisville, Ky., have been awarded the contract for erecting 142 buildings, including stations, shops, roundhouses, etc., on the 300-mile extension of this line to Montgomery, Ala.; estimated cost, $1,000,000. The work is expected to be done this winter. G. W. McGehee, Supt. Bridges and Bldgs., Okolona, Miss.

PENN YAN & PENNSYLVANIA.—J. D. Nares, Corning, N. Y., informs us that this company expects to build a steam railway from Penn Yan to Savona, N. Y., which will be standard gaged and laid with heavy rail. Sixteen miles of the line from Savona to Wayne, which is already graded, will be built this winter and the rest will be finished in the early spring. The board of directors met at Binghamton, N. Y., Nov. 22, and elected the following officers: Pres., George F. Andrews, Owego, N. Y.; Vice-Pres., C. C. Covert; Treas., C. A. Brown; Secy., A. K. Roberts, all of Binghamton, N. Y.; Gen. Mgr., J. D. Nares, Corning, N. Y.

POTOMAC SHORT LINE.—This company was incorporated in West Virginia, Nov. 22, with a capital stock of $25,000. It is proposed to construct a railway in Morgan county, W. Va.; principal place of business, Berkeley Springs, W. Va. Incorporators are T. H. B. Dawson, Berkeley Springs, W. Va.; M. T. Ingles, Martinsburg, W. Va.; P. E. Dawson, Jas. H. Bowles and J. F. Fields, all of Hancock, Md.

PRAIRIE HOME.—W. H. Lewis, Secy., Outten, Ill., writes us that the right of way for this proposed steam railway from Hervey City to Prairie Home, 10 miles distant, has been secured, and the contracts will be let during the coming winter. No cuts or grading will be necessary as the country is almost absolutely level. Pres., W. L. Miles; and Ch. Engr., J. F. Patton, both of Outten. Ira T. Baird, of Prairie Home, Ill., also informs us that Prairie Home is the center of a large and rich farming district, and that it is expected to make surveys in December. Charles Cole, of Dalton City, Ill., is one of the chief promoters of the enterprise.

WEST VIRGINIA NORTHERN.—This company has bought the right of way and improvements made for the proposed Battle Creek R. R., running from the Preston county line to Morgantown, W. Va. This company was organized about two years ago, as successor to the Tunnelton, Kingwood & Fairchance, and at present operates a line from Tunnelton to Kingwood, 10½ miles distant. It is said that the road will be extended to Morgantown in the spring. Pres., Geo. C. Sturgis, Morgantown, W. Va.; Engr., J. K. Monroe, Kingwood, W. Va.

STREET AND ELECTRIC RAILWAYS.

MILFORD, MASS.—S. M. Billings informs us that the Milford & Woonsocket St. Ry. Co., which proposes to construct an electric railway from Milford to Blackstone, via Hopedale and Mendon, a distance of 11 miles, has not yet been organized. C. M. Shippee, of Milford, is the prime mover of the enterprise.

PALMER, MASS.—F. T. Ley & Co., of Springfield, Mass., have been awarded the contract for constructing the Palmer & Monson street railway, connecting the several villages in this district. It is said that this company's offer for equipping the road will very probably be accepted also.

BROOKLYN, N. Y.—The board of aldermen, Nov. 29, granted a franchise to the East River R. R. Co. to construct 50 miles of electric street railways in this city. It is reported that this company is controlled by the Nassau Electric R. R. Co., of which A. L. Johnson, 37th St. and 13th Ave., is president.

FLUSHING (L. I.), N. Y.—Application was made before the village trustees, Nov. 27, by the Cross County R. R. Co., for a franchise to construct and operate a double-track electric street railway, commencing at the village line of Whitestone on Murray Ave., and running to Myrtle Ave., thence along Myrtle Ave. to 20th St., to the village line of Flushing, near Kissana Lake. This company was recently incorporated, with a capital stock of $250,000, by Joseph McLean, Andrew A. Halsey and Theodore Bernard, of Brooklyn.

NEW YORK, N. Y.—The Pelham Park R. R. Co., Nov. 29, applied to the board of aldermen for permission to extend its present one-track horse car line between Bartow to City Island, and also to change the motive power to electricity. The proposed extension is along the "Eastern Boulevard," from Pelham Manor to Westchester Village, a distance of 4 miles. Pres., Harry D. Carey.

PATCHOGUE (L. I.), N. Y.—J. H. Davis, Port Jefferson, informs us that the surveys have been made for this electric railway, from Port Jefferson to Patchogue, 14 miles, projected by the Patchogue & Port Jefferson Traction Co., and the right of way has been secured, but the franchise through Patchogue has not yet been obtained as the company and the village authorities have not agreed upon the terms. Pres., Edwin Bailey, Patchogue.

PHILADELPHIA, PA.—We are informed that plans are now being prepared for the line of the Union Traction Co. to the League Island Navy Yard, a distance of 11,100 ft. Pres., John Lowber Welsh, 304 Walnut St.; Gen. Mgr., J. B. Parsons.

BALTIMORE, MD.—It is reported that the Garrison Ave. R. R. Co. has been organized in this city with a capital stock of $100,000, to build an electric line along Garrison Ave., in the city and suburbs. Among the incorporators are: M. W. Offutt, Nelson Perin and Wm. A. House, Gen. Mgr., Consolidated R. R. Co.

MIDDLETOWN, MD.—We are informed that the surveys are completed for the proposed 5-mile electric railway through this town, and that data are now being prepared. The road will probably be built as soon as the legislature convenes and grants a charter.

PARKERSBURG, W. VA.—The Parkersburg City & Suburban Electric Ry. Co. was incorporated in this city, Nov. 19, with a capital stock of $300,000, of which $100 is paid in. W. W. Van Winkle informs us that the company proposes to construct a line in this city, 6½ miles long, and that surveys were to begin Dec. 1. Capital has been negotiated for. Contracts will be asked when the details are prepared from completed surveys, and when work begins it will be actively prosecuted towards completion. Engrs., Brown & Hazlett, Wheeling, W. Va. The incorporators are: James M. Jackson, Jr., John Busch, C. C. Martin, James A. Wetherell, J. N. Camden, C. H. Shattuck, H. H. Moss, W. W. Van Winkle, E. C. Gerwig and W. N. Chancellor, all of Parkersburg.

SALISBURY, N. C.—Reports state that the Salisbury St. Ry. & Electric Co. has been organized here and that it proposes to build a trolley line in this city and vicinity. D. L. Risley, of Philadelphia, Pa., is said to be interested.

SALUDA, S. C.—It is proposed to construct an electric line in this city with possible extensions to either Johnston's or Ridge Spring on the Southern Ry.

NEW ORLEANS, LA.—Walter V. Crouch, Secy. and Treas. New Orleans & Carrollton R. R. Co., Dublin and Jeanette Sts., informs us that the right of way has been secured for the proposed extension of this electric line for one mile to Southport; work has just been commenced and will be completed in about two months. Joseph Lenes, Pres.; Alex. L. Black, Ch. Engr., 2020 Baronne St.

OBION, TENN.—Application was made for a charter Nov. 19, by the Obion & Tiptonville Rapid Transit Co. It is proposed to build an electric railway from Obion to Tiptonville, via Hornbeck, Hamburg, Elbridge and Lane's Ferry. Among those interested are: G. B. Morris, W. M. Wilson, R. S. Lyons, T. J. Ogilvie, J. H. McDowell and T. C. Wilson.

ATLANTA, GA.—Dayton Hale, Pres. Atlantic Electric Ry. Co., informs us that application has been made by this company for an 8-mile extension through the center of Atlanta, past the post office and possibly to Buck Head, a total distance of 8 miles.

MOUNT CLEMENS, MICH.—Reports state that $60,000 in receiver's certificates have been issued in order to complete this electric line from Chesterfield to Algonac, about 18 miles; grading has already been done and part of track laid. The projected road, when completed, will run from Mount Clemens to Marine City, a distance of 35 miles. Receiver, Jas. G. Tucker, Mount Clemens.

FORT SCOTT, KAN.—The Citizens' Ry. Co., of this city, was incorporated Nov. 17 with a capital stock of $60,000, to operate an electric railway in Fort Scott. The directors are: W. B. Hurst, W. H. Frost, H. C. Post, C. B. McDonald, W. D. Lowry, D. P. Thomas, Grant Hornaday, W. C. Perry and John H. Crain, all of Fort Scott.

FLEMING, MO.—It is reported that the Pittsburg, Weir & Columbus Railroad Co., of Weir, Kan., is endeavoring to secure a franchise to build an electric line from Fleming to Weir, a distance of about 10 miles. Pres., Robert Simons.

SAUSALITO, CAL.—John M. Curtis, J. Washington and E. Steele contemplate the construction of a street railway and have petitioned the village trustees for a franchise.

SYDNEY, NEW SOUTH WALES.—H. W. Peabody & Co., of Sydney, was awarded the contract, Oct. 18, for building the car house entrance for the new George St. Tramway at £1,200, 4s. ($6,001). The following were lowest bidders on other proposed work: Hudson Bros., for supplying iron work for poles, at £1,919 18s. 6d.; J. McSweeney, for constructing a permanent way, at £12,754; Wilmot & Morgan, for constructing another section of the permanent way, at £25,690 19s. 9d.

ELECTRIC LIGHT AND POWER.

BAYSIDE (L. I.), N. Y.—Dr. Chas. B. Story, Henry Wasner and Wm. Corry have been appointed a committee by the East End Improvement Association to secure an extension to this place of the plant of the Flushing Electric Light Co.

CLYDE, N. Y.—L. L. Moses, Treas. Clyde Electric Co., writes us that the proposed line to Savannah will not be built until spring. The company is preparing to put in a 500-volt power circuit and will be in the market for a 125 or 150-K-W. generator.

WARWICK, N. Y.—Press reports state that the trustees have granted a franchise for an electric light plant to Sharpe & Chapman. Population, 2,000.

ERIE, PA.—Local papers state that the Merchants & Manufacturers' Electric Co. will let the wiring contract at once for its new plant. It is said that the contracts for furnishing the machinery have not yet been let. This company was recently awarded the contract to light the city for a term of five years.

WASHINGTON, D. C.—The U. S. Electric Lighting Co. has applied to the district commissioners for permission to extend its electric wire conduits through the streets to the northern boundary of the city.

WASHINGTON, D. C.—The power house at 13½ and B Sts., belonging to the U. S. Electric Light & Power Co., was partially destroyed by fire Nov. 26, causing a loss of about $50,000.

FORT MONROE, VA.—Bids are asked until Dec. 23 for furnishing and erecting an electric light plant at Fort Monroe, as stated in our advertising columns. Capt. Thos. L. Casey, U. S. Engrs., 166 Granby St., Norfolk, Va.

MARION, VA.—It is reported that New York parties have been granted a franchise for an electric light plant in this place. Population, 2,000.

ROANOKE, VA.—W. W. Berkeley writes us that a movement is being made to consolidate the Roanoke St. Ry. Co. and the Electric Light & Power Co.

MADISON, GA.—Collier George, Mayor, writes us that a report of this place proposing to erect an electric light plant is a mistake. The city has owned and operated successfully an electric light plant for several years.

HARRIMAN, TENN.—Press reports state that the city has directed the mayor to purchase machinery for an electric plant of 1,500 lights, etc., to cost about $5,000. Population, 5,000.

LOUDON, TENN.—Ulrich Ita is reported as interested in a proposed electric light plant for this place. Population, 1,200.

ELIZABETHTOWN, KY.—The construction of an electric light plant is reported as being discussed. Population, 2,500. P. L. Wintersmith, Mayor.

IRONTON, O.—The question of issuing $20,000 in bonds for electric light plant will be voted upon Dec. 18. Population, 13,000. J. M. Corns, Mayor.

WARREN, O.—Councilman Moser has submitted an ordinance to the council authorizing the city solicitor and the fire and water committee to investigate the question of purchasing the electric light plant and water-works of the Warren Light & Power Co. and the Warren Water Co., respectively.

FOWLER, IND.—S. Newkirk informs us that the electric light company is placing new machinery and making other improvements to its plant.

GAS CITY, IND.—The Seckner Contracting Co., Chicago, Ill., has been awarded the contract for constructing an electric light plant and water-works for this city, the work to be completed by March.

GREENFIELD, IND.—We are informed that this city wants plans and specifications prepared for an electric light plant. Correspondence with the electrical engineers is especially solicited. Wm. R. McKown, Cy. Clk.

HOBART, IND.—The contract for constructing an electric light plant and water-works for this place has been let to the Seckner Contracting Co., 351 The Rookery, Chicago.

WORTHINGTON, IND.—F. B. Sherman, Chicago, is reported to have been granted a franchise for an electric light plant and water-works.

CHICAGO, ILL.—Edward B. Ellicott, Supt. City Telegraph Dept., writes us that $150,000 has been appropriated for extending the electric light system.

CHILTON, WIS.—At the election recently held, this place is reported to have voted to construct an electric light plant. Population, 1,500.

WESTBY, WIS.—The construction of electric light plant is proposed, according to reports. Population, 300.

KANSAS CITY, KAN.—Local papers state that the Consolidated Electric Light & Power Co. proposes to erect a new brick power station on the west bank of the Kaw River, to be twice the capacity of the present station on North Fifth St.

ORTONVILLE, MINN.—It is stated that the late election on the question of issuing bonds for an electric light plant was illegal and a new one will probably soon be called.

ELKPOINT, S. DAK.—The aldermen are considering the question of an electric light plant in connection with the proposed water-works.

LA GRANGE, MO.—Bids are asked until Dec. 10 for the purchase of $6,000 of 5% bonds for erecting the proposed electric light plant. Louis Schneider, Cy. Clk., writes us that plans and specifications for the plant will be ready for distribution at once. Des. Engr., I. L. Fawcett, La Grange.

OREGON, MO.—An election will be held on Dec. 14 to vote on the question of issuing $25,000 in 6% bonds for an electric light plant and water-works. D. P. Dobyns, Editor "Sentinel," writes us that the propositions will without doubt carry. Engr., Hiram Phillips, Oriel Bldg., St. Louis; Mayor, H. T. Alkire.

BOERNE, TEX.—Press reports state that D. A. Foote and Otto Beseler propose to build an electric light plant, ice factory, etc., at this place. Population, 300.

DALLAS, TEX.—C. L. Wakefield is reported to have been granted a franchise for furnishing this city with electric lights. Mr. Wakefield and P. D. C. Ball, of the Dallas Ice Co., are said to be organizing a company to make the improvements, to cost about $100,000.

HOUSTON, TEX.—An election is reported to have been held Nov. 29 to vote on the question of issuing $100,000 in bonds for a municipal electric light plant. H. B. Rice, Mayor.

LEADVILLE, COLO.—The council has awarded the following contract for public lighting to the Leadville Light Co.: 1 to 30 arc lights, 2,000 c. p. a month, each $15; 30 to 35 arc lights, 2,000 c. p. a month, each $14.50; 35 to 40 arc lights, 2,000 c. p. a month, each $14; 40 arc lights and over 2,000 c. p. a month, each $13.50. No charge is to be made for use of lights in the council chambers and the fire stations. The city is to use at least 21 arc lights.

LAKEVIEW, ORE.—W. T. Boyd, Recdr., writes us that J. Anthony, who recently received a 20-year franchise for lighting this place, is now putting in the plant.

SONORA, CAL.—Capt. Nevills, Mgr. the App Mine, is quoted as stating that the owners have in contemplation the erection of a large chlorination works, besides which the work will be equipped with a complete electric power plant.

ASHCROFT, B. C.—John Shields, Ashcroft and Barkerville, B. C., is reported as considering the question of an electric light plant and water-works for this place. Population, 300.

NEW COMPANIES.—Kitson Hydro-Carbon Light Co., Birmingham, Ala.; to manufacture and introduce the Kitson hydro-carbon light, to make apparatus, etc.; $50,000; H. W. Perry, Pres.; J. W. Minor, Vice-Pres. and Gen. Mgr.; J. W. Scriggs, Secy.

Citizens' Electric Light, Power & Heating Co., Middletown, N. Y.; $25,000; Clarence S. Abrams, John E. Adams, U. T. Hayes, C. R. Fuller, Aaron Samuels, Charles H. Brink, Secy.

BRIDGES.

BOLIVAR, N. Y.—It is reported that a contract has been awarded to the Horseheads Bridge Co., Horseheads, N. Y., to construct a bridge across Bolivar Creek on the Salt Rising Road.

BUFFALO, N. Y.—Reports state that this city will reconstruct the north and south abutments of the Chicago St. bridge.

NORTH TONAWANDA, N. Y.—Reports state that the council has voted to ask the legislature to grant it permission to construct a bridge to Grand Island. Edward Evans and Jos. P. Lindsay may be addressed.

SYRACUSE, N. Y.—Local papers state that the construction of a bridge over the Onondaga Creek at West Water St., will be proposed to the legislature.

ALLEGHENY, PA.—We are informed that nothing will be done until next year in regard to the construction of the proposed bridge to connect Gever Ave. with Shady Ave.; estimated cost, $35,000. Robert McAfee, Dir. Dept. Pub. Wks.

BIRMINGHAM, PA.—Bids are asked until Dec. 14 for constructing a substructure for the bridge over the Little Juniata River at this place. Amos H. Mylin, Audr.

WILLIAMSPORT, PA.—Reports state that this city is contemplating the construction of a bridge over Grofius Run at an estimated cost of $20,000.

WILLIAMSPORT, MD.—Reports state that the construction of an iron bridge, to cost about $35,000, to span the Potomac River at this place, is being considered.

COLUMBIA, S. C.—Local papers state that the South Carolina & Georgia R. R. Co. will construct a steel drawbridge over the Savannah River at this place; estimated cost, $50,000.

BUCKINGHAM, VA.—Bids are asked until Dec. 6 for the construction of a steel highway bridge, 52 ft. long by 12 ft. wide, weighing 1,000 lbs. a lin. ft. Jno. R. Moss, County Judge, Buckingham.

FAIRMONT, W. VA.—Reports state that a bridge to cost $4,400 will be constructed by Wistwater & Co. over the Monongahela Fork at Little Falls.

ATLANTA, GA.—Local papers state that the council will recommend the construction of a new bridge over the Southern Ry. tracks at Whitehall St., to be commenced next spring.

BIRMINGHAM, ALA.—Reports state that at a recent meeting of the state board of railroad commissioners, the bridge on the Birmingham & Atlantic R. R., crossing the Coosa River, was condemned. It will be replaced by a new structure to cost about $25,000.

MONROE, LA.—Reports state that the Groton Bridge & Mfg. Co., Groton, N. Y., will be awarded the contract, at about $88,000, for constructing a highway bridge across the Ouachita River at this place.

HARDINSBURG, KY.—Bids are asked until Dec. 20 for constructing a wooden or steel bridge, with a 55-ft. span and 12 ft. roadway, across Sinking Creek, at the Custer and Rosetta Road crossing. R. N. Miller and Wm. Ahl may be addressed.

VALPARAISO, IND.—Bids are asked until Dec. 31 for constructing a bridge across Coffee Creek in Jackson township. Jas. S. Fulton, Chn. County Comrs.

BLACK RIVER FALLS, WIS.—Reports state that $1,200 has been voted for the construction of a new iron bridge over the Black River, near Hatfield.

OMAHA, NEB.—It is reported that bids will be asked for the construction of two bridges to cross the lagoon, near Kountze Park; estimated cost, $10,000. Mr. Kirkendall, Mgr. Buildings and Grounds Com.

OLIVET, S. DAK.—Bids are asked until Dec. 14 for constructing a steel bridge, 150 ft. long by 32 ft. wide, having a 60-ft. span, over the James River, at this place. J. S. Muller, County Audr.

LAKE CITY, ARK.—A drawbridge is being built over the St. Francis River at this place, having a drawspan of 53 ft., with a jackknife lift of 30 ft. in the clear, and 3,539 ft. of pile approach. Engr., W. O. Bunce, Jonesboro, Ark. The Dildine Bridge Co., Cameron, Mo., has the contract for the drawspan and Love & Cole have the contract for the piling.

ST. JOSEPH, MO.—Press reports state that the council has passed an ordinance for the construction of a viaduct to cover the railway tracks near the stock yards; estimated cost, about $100,000.

BUILDINGS.

ALBANY, N. Y.—The board of governors of the Albany Hospital have adopted plans for the new hospital buildings to be built on the New Scotland Road, at a cost of about $200,000. Treas., Charles R. Knowles; Arch., A. W. Fuller.

BINGHAMTON, N. Y.—Bids are asked until Dec. 7 for erecting a laundry building for the Binghamton State Hospital.

BROOKLYN, N. Y.—Bids are asked until Dec. 7 for heating and ventilating new school buildings Nos. 116 and 118 and the new addition to Erasmus Hall high school. E. W. Schaedle, Chn. Heating and Ventilating Com., 131 Livingston St.

BUFFALO, N. Y.—H. Spangenthal will build a 3-story block on Main St., at a cost of $20,000.——The council is discussing the erection of a convention hall for the city.

GENEVA, N. Y.—The following bids were received Nov. 16 for the heating apparatus for the state experimental station at this place; Whitman H. Jordan, Director:

Barr & Creelman, Rochester, N. Y.	$2,530
Evans, Almirrall & Co., 41 Dey St., New York	3,005
Heendeen Mfg. Co., Geneva, N. Y. (accepted)	2,135
Vance Boiler Works, Geneva, N. Y.	2,773
Richard T. Ford, Rochester, N Y.	2,847
Gaylord & Eitapem, State and Henry Sts., Binghamton, N Y.	2,773
Blake & Williams, 186-188 S. 5th Ave., New York	3,983
Breen Bros., Utica, N Y.	2,895
Frank Dobson, 218 East 42d St., New York	3,445
Edward P. Bates, 228 W. Water St., Syracuse, N. Y.	2,583
E. Rutzler, 178 Centre St., New York	3,469
Wm. N. Tobin, 315 E. Genesse St., Syracuse, N Y.	2,966
Edward Joy, Syracuse, N. Y.	2,675
Edward J. Rice, 101 W. Main St., Rochester, N. Y.	2,973

LONG ISLAND CITY (L. I.), N. Y.—The board of supervisors of Queens county has directed Preston B. Seaman, 69 3d St., to prepare plans for remodeling the county court house and erecting a new jail in the rear of the present building; estimated cost, $100,000.

NEW YORK, N. Y.—Bids are asked by the board of education, at 585 Broadway, until Dec. 6, for erecting a new public school building on East 183d St. (Columbine), between Beaumont (Jackson) and Cambreling (Monroe) Aves.——A new hotel will soon be erected, according to reports, at 125th St. and Park Ave. Harry Chaffee is said to be the interested party.——Plans have been filed by Michael Hanlon, 2100 Lexington Ave., for an 8-story brick store and warereom building at 159 and 161 Crosby St., to cost $100,000. Archs., Horenburger & Straub, 122 Bowery; by Weil & Mayer, 227 East 60th St., for two 6-story brick tenement and store buildings at 241 and 259 East 7th St., to cost $50,000. Archs., Schneider & Herter, 36 East 75th St.; by Leipold Kahn Co., 2213 7th Ave., for a 7-story brick flat building at 7th Ave. and 137th St., to cost $127,000. Arch., Henry Anderson, 1180 Broadway.——The following bids were received by the park department Nov. 22 for erecting the new east wing of the Museum of Art in Central Park; (a) using Indiana limestone, (b) using white marble:

	(a)	(b)
Jas. D. Murphy, 1181 Broadway	$762,000	$970,000
P. Gallagher, 156 5th Ave.	838,687	1,098,687
Thomas Dwyer, Temple Court	692,860	999,860
T. Mahony & Son, 156 5th Ave.	765,911	978,911
D. C. Weeks & Son, 289 4th Ave.	873,445	1,076,732
J. B. Smith, 18 Broadway	832,890	1,037,365
Grace & Hyde Co., 26 East 42d St.	721,900	743,900
Norcross Bros., 160 5th Ave.	771,995	916,995
Jno. J. Hopper, 215 West 25th St.	743,000	1,010,000

The following bids were received by the department of charities Nov. 23 for the alteration of a frame dwelling and construction of a new frame building for Fordham Hospital:

Christopher Nally Co., 102 West 81st St.	$13,285
F. X. O'Connor, 201 West 45th St.	17,000
H. H. Vought & Co., 159 East 54th St.	17,723
Herman Probst, 1180 Broadway	17,930
Price & Carl, 514 1st Ave.	17,980
A. B. Marshall, 81 East 125th St.	19,375
Jno. F. Johnson, 114 East 124th St.	23,287
John Furey, 1684 2d Ave.	23,431

The following bids were received by the dock department Nov. 24 for enclosing building on pier at the foot of East 24th St. and preparing the same for a winter resort:

Price & Carl, 514 1st Ave (accepted)	$18,998
R. H. Hood, St. Paul Bldg.	19,888
Ryan & Bowler	19,988
C. & P. Ryan (informal)	42,500

NEW YORK, N. Y.—Bids are asked by the fire department, 157 and 159 East 67th St., until Dec. 10, for furnishing the materials and labor required in altering and repairing the building of this department occupied by Engine Company No. 48, at 2,504 Webster Ave.; two bonds required, $5,500 each; also for altering and repairing the hospital stables at 133 and 135 West 99th St.; two bonds required, $1,300 each.——Bids will be asked by the board of estimate and apportionment, until Dec. 14, according to report, for building the new Hall of Records at Chamber and Center Sts. Arch., John R. Thomas, 160 Broadway.——Plans have been filed by E. J. Faunce, 94 West 104th St., for five 5-story brick flat buildings on 158th St., near the Grand Boulevard, to cost $105,000. Arch., C. Steinmetz, 217 West 125th St.——The following bids were opened by the park department, Nov. 29, for constructing a new museum building, power house and appurtenances in the Botanical Gardens in Bronx Park:

John H. Parker Co., 256 Broadway	$347,019
P. Mahony & Sons, 156 5th Ave.	374,900
Murphy Bros., 407 East 101st St.	379,979
G. A. Fuller & Co., 160 5th Ave.	381,612
Thos. F. Cockerill & Son, 550 W. 41st St.	387,775
Thomas Dwyer, Temple Court	388,494
John H. Deeves & Bro., United Charities Bldg.	390,000

TROY, N. Y.—Bids are being received by E. W. Loth, Arch., 253 Broadway, for a 5-story office and assembly hall building, to be erected for the Burdett estate on River St. The building will have a pressed brick and marble front, with steel beams, two boiler engines and an elevator; estimated cost, $30,000.

CAPE MAY, N. J.—Bids are being received, according to reports, for constructing a stone and brick church building for the Presbyterian Church, to cost $20,000. Arch., J. Cather Newsom, 1001 Chestnut St., Philadelphia, Pa.

DEAL, N. J.—Reports state that a frame hotel will be erected in this town at a cost of $75,000. Arch., Gilbert A. Schellinger, 128 Broadway, New York.

HOBOKEN, N. J.—Bids are asked by the mayor and council of this city until Dec. 15 for the plumbing work and the painting of the armory. M. V. McDermott, Cy. Clk.

GROVE CITY, PA.—This city has voted to issue $150,000 in bonds for constructing new school buildings.

KITTANNING, PA.—A fire in this city Nov. 26 destroyed McCullough's hardware store, Beale's dry goods store, Heilman's house furnishing store, the Armstrong Water Co.'s building, Merchants' National Bank and the law office of Ross Reynolds, causing a reported loss of about $60,000.

PHILADELPHIA, PA.—The furnishing store of Apt Bros., 39 and 41 North 8th St., was destroyed by fire Nov. 28, causing a loss of about $75,000.

PITTSBURG, PA.—Plans have been prepared, according to reports, for a brick and stone dwelling to be erected here for Harry Robins, 830 Liberty Ave., to cost $45,000. Arch., Sidney Heckert, Stevenson Bldg.

WASHINGTON, D. C.—The following bids were received by the department of justice Nov. 20 for constructing 32 cells for female prisoners in the jail in this city: Champion Iron Works, Champion, O., $4,935; Van Dorn Iron Works, Cleveland, O., $4,245; Smith Pettit, Washington, $12,800; Pauly Jail Bldg. & Mfg. Co., St. Louis, Mo., $6,124; R. H. Hood, Washington, D. C., $4,774; Portsmouth Steel Structural & Iron Co., Portsmouth, O., $4,778; Geo. W. Corbett, Washington, $10,500; Tacony Iron & Metal Co., Tacony, Philadelphia, Pa., $7,032; Stewart Iron Works, Cnicinnati, O., $4,698; Rome Locomotive & Machine Works, Rome, N. Y., $7,000.

NEWPORT NEWS, VA.—An election will be held here Dec. 21 to vote on the issuance of $15,000 in bonds for a new city prison and $75,000 for sewerage. J. J. O'Donnell, Pres. Council.

PORTSMOUTH, VA.—Bids are asked until Dec. 14 for building St. Paul's Catholic Church in this city. Secy., Geo. W. Martin.

HAWKINSVILLE, GA.—Plans and specifications have been accepted for the new Pulaski county court house to be erected here. Archs., Andrew J. Bryan & Co., Atlanta, Ga.

TOUGALOO, MISS.—A fire at this place Nov. 24 destroyed the dormitory of the Tougaloo Negro University, causing a loss of about $20,000.

CINCINNATI, O.—The board of directors of the National German Deaconess homes of the M. E. Church contemplates erecting a Deaconess hospital in this city, at a cost of $100,000, of which amount $25,000 has already been raised.

LANCASTER, O.—Bids are asked until Dec. 10 for constructing a new fire engine house. H. T. Mechling, Cy. Clk.

LORAIN, O.—Plans have been prepared for a new Y. M. C. A. building, to cost $40,000. Archs., Coburn & Barnum, Cleveland, O.

INDIANAPOLIS, IND.—Bids are asked until Dec. 21 for constructing the new Odd Fellows' building in this city. George Shirts, Chn. Bldg. Com., Noblesville, O.; A. W. Rush & Son, Archs., 132½ Monroe St., Grand Rapids, Mich.

CHICAGO, ILL.—Plans are being prepared for extensive improvements to the Hotel Brevoort, on Madison St., between Clark and La Salle Sts. The property is owned by Hannah & Hogg and leased to the Brevoort Hotel Co. Work will not be started until after Jan. 1.——Plans are being prepared, according to reports, for five brick and stone dwellings to be erected on North Paulina St., near Sunnyside Ave., for Wm. G. Bletsch, to cost $75,000. Archs., Gatterdam & Krieg, Schiller Bldg.

KANKAKEE, ILL.—The Riverview Hotel, owned by Ernest Cobb, was recently destroyed by fire; reported loss, $85,000.

OTTUMA, ILL.—Plans have been accepted for the new brick and stone high school building, 100 × 140 ft., to be erected in this city; estimated cost, $40,000. Arch., Clinton C. Nourse, 47 Office Bldg., Des Moines, Ia.

WHITE EARTH, MINN.—Plans are being prepared for a new Indian school building to be erected at this place, at a cost of $50,000.

PARK RAPIDS, MINN.—Ferdinand Mueller, County Audr., writes us that the matter of issuing Hubbard county bonds for the building of a court house will be brought up at the next general election, which will be held Nov. 8, 1898.

GRANT CITY, MO.—Bids are asked until Dec. 13 for $25,000 of 5% court house and jail bonds. Henry Swift, County Treas.

ST. LOUIS, MO.—B. Weber & Son, of this city, have been awarded the cantract for constructing the new 8-story building for the Commerce Realty Co., at $182,442. Festus J. Wade, Pres. Commerce Realty Co.

JAMESTOWN, N. DAK.—Bids are asked until Dec. 20 for furnishing and placing a steam heating plant for the county court house, according to reports. Geo. H. Woodbury, Chn. County Comrs.

HOUSTON, TEX.—Bids are asked by Rue & Dunbar, Archs., until Dec. 24, for constructing a 12-room brick school building for this city, according to reports.

WHITTIER, CAL.—The trustees of the Whittier reform school have decided to erect a new college building at an estimated cost of $100,000.

STRATFORD, ONT.—A fire in this city Nov. 24 destroyed the city hall, causing an estimated loss of $150,000.

WATER-WORKS.

CROMWELL, CONN.—It is reported that an election will probably soon be held to vote on the question of works. Population, 2,500.

SEYMOUR, CONN.—Surveys are reported as being made for a reservoir, etc., for the proposed works for this city. Population, 3,500.

STAFFORD SPRINGS, CONN.—The Stafford Springs Water Co. proposes to build a new reservoir for an increased water supply, according to reports. Pres., Alfred Birnie. Anthony Adams, Supt., writes us that nothing has been done in regard to the matter as yet.

WATERVILLE, CONN.—The Waterville Water Co. has been incorporated with a capital stock of $3,000.

BLUEPOINT (L. I.), N. Y.—It is stated that the people of this place have asked the Great South Bay Water Co., which supplies this place with water, to place a number of hydrants in the town for fire protection. Secy., C. A. Lockwood, Bay Shore, L. I.

FULTON, N. Y.—Fred. G. Spencer, Chn. Com., writes us that the committee is corresponding with engineers for estimates on the proposed municipal works. Mr. Spencer would like to secure the names of more engineers. Population, 5,000.

MOUNT KISCO, N. Y.—F. Dromgoole, Editor "Recorder," writes us that it is not yet decided when the proposed works will be built. The land has not been bought. At a special meeting $25,000 in bonds were voted for the improvements. The water will be furnished by gravity. There will be eight miles of 4 to 10-in. pipe, 50 double-nozzle fire hydrants, a small pumping engine of 12-HP. steam or gasoline, two reservoirs, requiring only dams across lower end of natural basin, of 1,000,000 and 500,000 gallons capacity.——Another correspondent states that the board of commissioners has ordered plans and specifications to be prepared. It will be ready to receive bids in January. Supervising Engr., E. Delavan Smalley, Syracuse, N. Y.

TOTTENVILLE (S. I.), N. Y.—The West End Water Co. has been incorporated with a capital stock of $10,000; directors, J. B. Newhall and Ernst Cossmann, of Stapleton, S. I.; Peter Floersch, George Dubois, F. L. Hadkins, Chas. N. Lehman and George Haehn.

BELLEVILLE, N. J.—Pancoast & Rogers, New York, have been awarded the contract for furnishing water pipe for the proposed works at Soho, and Geo. P. Allcott, Orange, N. J., has been awarded the contract for laying the pipe. Engr., Chas. W. Leavitt, Jr., 15 Cortlandt St., New York.

LONG BRANCH, N. J.—The Holly Mfg. Co., Lockport, N. Y., is reported to have been awarded the contract for furnishing and erecting a pumping engine of 6,000,000 gallons capacity at the Hollywood station of the Long Branch Water Supply Co.

TOMS RIVER, N. J.—The contract for constructing the complete works, as advertised in Engineering News, has been awarded to E. A. Allcott & Son, of Mount Holly, N. J., as noted in our issue of last week. The water tank tower of 50,000 gallons capacity has already been ordered of Tippett & Wood, Philipsburg, N. J. Gasoline engines and power pumps will be used. Engr., Chas. J. Everett, Jr., 253 Broadway, New York.

ERIE, PA.—Local papers state that the question of a stand-pipe in the south part of the city is being considered. Clark Olds, Water Comr.

LEBANON, PA.—Bids are asked until Dec. 13 for laying 8-in. water pipe in Walnut St., to cost about $1,500. City Clerk Beckley and Mayor Weimer may be addressed. ——The committee has recommended that additional wells for an increased water supply be sunk at a cost of about $4,000. J. R. Beckley, H. P. Weitzel and C. N. Seidle compose the committee.——The mayor has signed the ordinance providing for the purchase and placing of 50 hydrants. Geo. W. Hayes, Cy. Engr.; J. D. Kerr, Clk. Bd.

MAHONINGTOWN, PA.—The Shenango Water Co. has been incorporated with a capital stock of $1,000 to supply this place with water. Population, 3,000. Harvey T. Halleck, Pittsburg, Pa.

NEW CASTLE, PA.—We are informed that the New Castle Water Co. has awarded the contract for furnishing and erecting a 4,000,000-gallon gravity filtration plant to the New York Filter Mfg. Co., 120 Liberty St., New York. Work will be pushed as rapidly as possible. Supt., J. W. Taylor.

DELAWARE CITY, DEL.—It is reported that this place has voted in favor of works. C. Taylor Leland, Quakertown, Pa., will organize a company to put in the works. Population, 1,100. Geo. B. Money, Mayor.

BIG STONE GAP, VA.—A. J. Hoback, Recdr., writes us under date of Nov. 22 that an election was called for Nov. 27 to vote on the question of issuing $40,000 in 30-year 5% bonds to buy and improve the water-works owned by the Glamorgan Pipe & Foundry Co. The supply is furnished by gravity. Certain changes will be made and reservoirs constructed. Population, 1,800. J. L. Jennings is in charge.

ELKINS, W. VA.—G. W. Harrison, Jr., Councilman, writes us that the question of issuing bonds for works is about to be submitted to the vote of the people. Population, 1,000. Engrs., Pownell & Minshall, 150 Nassau St., New York.

KENOVA, W. VA.—The council is reported to have granted a franchise for works to W. A. Patton, Supt. Catlettsburg, Kenova & Ceredo Water Co., Catlettsburg, Ky. G. K. Osgood, Recdr., writes us the work will require 19,500 ft. of 1 to 8-in. pipe.

LOUISBURG, N. C.—A. W. Green is reported as interested in the proposed works. Population, 1,000.

SANFORD, N. C.—The Sanford Water & Light Co. has been incorporated with a capital stock of $25,000 by W. J. Edwards, W. A. Monroe and Moffitt Bros.

MACON, GA.—T. D. Tinsley, Receiver for the Macon Gaslight & Water Co., writes us that all plans for the proposed improvements to the works have been prepared, and the contracts have also been provided for.

DE FUNIAK SPRINGS, FLA.—The De Funiak Springs Water & Electric Light Co. is being organized with a capital stock of $10,000 by T. F. McYourin, R. W. Storrs, A. J. Griffin and Wm. Rogers.

BIRMINGHAM, ALA.—The Artesian Water Co. is said to be completing plans for works to supply this city, Avondale and Woodlawn. Geo .C. Kelley is interested. ——The Birmingham Water-Works Co. is considering the question of filtering its water supply. Supt., W. J. Milner.

CULLMAN, ALA.—It is reported that the council is now considering the question of granting a franchise for works and an electric light plant. Plans for works were prepared early in the year, but the question of a municipal plant was indefinitely postponed last summer. Population, 1,200. W. H. Jones, Cy. Clk.

HUNTSVILLE, ALA.—Bids are asked until Dec. 6 for furnishing two 3,000,000-gallon pumping engines and two 125-HP. boilers, 72 ins. × 16 ft., for the water-works. Engr., J. L. Ludlow, Winston, N. C.; Chn. Com., R. L. O'Neil.

CLARKSDALE, MISS.—Press reports state that an artesian well has been sunk in this town for a water supply. Walter Clark may be addressed.

GALLATIN, TENN.—The committee, consisting of Jas. W. Blackmore, Robt. Beebe and W. H. Spradlin, has submitted its report on the proposed works. The works will require a 10-in. main from the source of supply, a spring, to the city, a distance of nine miles, a pumping station, two boilers, two pumps, a stand-pipe of 150,000 gallons capacity, etc.; estimated cost, $33,000. The question will have to be decided by a vote of the citizens.

MEMPHIS, TENN.—The matter of annexing the suburbs of Memphis to the city, and extending the sewerage and water systems to the annexed territory is being agitated, and the governor has been petitioned to call an extra session of the legislature for the purpose of enacting the legislation necessary for this step. The suburbs of Madison Heights, Idlewild and North and South Memphis, lie within the territory it is proposed to annex.

ROCKWOOD, TENN.—Press reports state that subscriptions toward the cost of the proposed works are being secured; estimated cost, $30,000. H. Fowler and Willard Warner, Jr., may be addressed.

CINCINNATI, O.—Bids are asked until Dec. 9 for furnishing and constructing 15 wooden filter tanks of 11.78 ft. in diameter and from 6 to 10 ft. deep and for four steel riveted filtration tanks, each of 25 ft. diameter and 34 ft. deep. August Herrmann, Pres. Bd. Administration; Chas. G. Roth, Clk. It is hoped by the board to have all bids in for the construction of the proposed new works by January.

ELMWOOD PLACE, O.—J. H. Bart, Mayor, writes us under date of Nov. 22 that this place has voted to issue $15,000 in bonds for works. Bids will be asked at once for the sale of the bonds. This will require 30 days, soon after which work will be begun. No engineer has up to Nov. 22 been engaged. J. M. Percy, Chn. Com. on Law and Contracts.

LANCASTER, O.—Local papers state that Henry Karg submitted the lowest bid last month for constructing extensions to the works at $9,215. J. B. Orman, Pres. Comrs.; Louis Snyder, Clk.

MOUNT GILEAD, O.—Geo. J. Young, Clk., informs us that the recent election on the question of works, noted in our issue of last week, was merely informal, and was of no account from a legal standpoint. When a formal election will be called is not known. Estimated cost, $48,000.

WARREN, O.—Councilman Moser, Chn. Fire and Water Com., has introduced an ordinance authorizing the city solicitor and the committee to investigate the cost of purchasing the plants of the Warren Water Co. and of the Warren Light & Power Co. The property is valued at about $150,000.

CLAY CITY, IND.—Press reports state that the council has refused to grant a franchise to a Chicago company, and has also indefinitely postponed the water question.

FOWLER, IND.—We are informed that the owners of the water-works of this place will put in new mains. Population, 1,500.

GAS CITY, IND.—The Seckner Contracting Co., 351 The Rookery, Chicago, Ill., has been awarded the contract for water-works and an electric light plant for this city. Population, 4,000. The work is to be completed by Mar. 1. Secy. and Treas., J. H. Brown, Chicago.

HOBART, IND.—The contract for constructing works and an electric light plant in this place, to cost about $20,000, has been awarded to the Seckner Contracting Co., Room 351 The Rookery, Chicago. The work is to be completed by Mar. 1. Pres., C. M. Seckner, Chicago.

LAPORTE, IND.—G. R. Tynell, Supt. Water-Works, writes us that the city is sinking test wells for an increased water supply, as noted in our issue of last week. No plans as yet have been prepared. Population, 18,000.

PIERCETON, IND.—We are informed that the town is talking of putting in works in the spring. Population, 1,100.

WILLIAMSPORT, IND.—The construction of works is being considered, according to reports. Population, 1,300.

WORTHINGTON, IND.—F. B. Sherman, Chicago, Ill., is reported to have been granted a franchise for works and an electric light plant. Population, 1,700.

COWDEN, ILL.—O. A. Jewett, Cy. Clk., writes us that water-works is not proposed for this place, as was reported last week.

PEORIA, ILL.—Local papers state that Frank L. Wean, 115 Monroe St., Chicago, special master for the Peoria Water Co., is making arrangements for the sale of the plant, which will be advertised in January. For further information see 1897 "Manual of Am. Water-Works." Receiver, C. B. Gold, 15 Wall St., New York.

ASHLAND, WIS.—It is reported that J. A. Colwell, Ashland, has been awarded the contract for constructing the works at the Lac du Flambeau reservation at $3,900.

LYNNVILLE, IA.—The construction of works is being considered, according to reports. Population, 500.

PETERSBURG, IA.—The construction of works is reported as under consideration. Population, 200.

ORTONVILLE, MINN.—Press reports state that the election held last summer to vote on the question of works was illegal and new one will be held. Bids were received Nov. 2 for constructing the works and an electric light plant, to cost $15,000. S. A. Thomas, Cy. Recdr.

NEODESHA, KAN.—Press reports state that this place voted Nov. 16 to issue $30,000 in bonds for municipal works and gas plant. J. M. Walker, Supt. and Cy. Engr.

HAVELOCK, NEB.—The council is reported to have awarded the contract for constructing works to Sheely & O'Shee, Lincoln, Neb., at $4,096.

BOZEMAN, MONT.—Geo. D. Pease, Cy. Clk., writes us that the election held Nov. 16 resulted in favor of issuing $56,000 in 20-year 6% bonds for the construction of works.

FAYETTE, MO.—S. C. Salson, Cy. Clk., writes us that the proposition to issue $3,000 in bonds for sinking an artesian well was voted down at the election held last month.

MOBERLY, MO.—It is stated that the Moberly Water-Works Co. will extend its plant. Population, 12,000. Secy., Chas. C. Mackay, Bay Ridge (L. I.), N. Y. Supt., H. V. Estill.

OREGON, MO.—D. P. Dobyns, Editor "Sentinel," writes us that an election will be held Dec. 14 to vote on the question of issuing $25,000 in 6% bonds for works and an electric light plant. The plans and specifications, prepared by Hiram Phillips, 306 Oriel Bldg., St. Louis, Mo., were adopted Nov. 13. H. T. Alkire, Mayor; L. I. Moore, Clk.

TRENTON, MO.—The Trenton Water Co. has let contracts for extending the mains 6,500 ft. Supt. Morris may be addressed.

WARREN, MO.—It is reported that this place will construct works next year to cost about $12,000.

GRAND JUNCTION, COLO.—Judge Butler, Denver, has refused to grant an injunction restraining the city from constructing municipal works, to cost about $65,000. It is probable that work on the improvement will now be pushed to completion.

HOQUAIM, WASH.—Bids are asked by the town authorities until Dec. 7 for the purchase of a water-works franchise, according to reports. Population, 2,000.

MONTESANO, WASH.—An election will be held Dec. 7 to vote on the question of issuing $18,000 of 6% 20-year bonds for the purchase of the water-works. D. W. Fleet, Cy. Clk.

AVALON, CAL.—The question of constructing a water-works tunnel, 4 × 6 ft., 3,000 ft. long, up the canyon, is being considered, according to reports.

BERKELEY, CAL.—Press reports state that unless the Alamada Water Co. furnishes this city with more water steps will probably be taken to secure a municipal works.

ELSINORE, CAL.—The Elsinore & Wildomar Water Co. has been incorporated with a capital stock of $25,000, $11,682 of which is paid in; directors, C. H. Lewis, Wildomar, Cal.; Wm. Collier, Riverside, Cal.; W. T. Hohenshell, and others, of Elsinore.

FORT BRAGG, CAL.—It is stated that this place voted against issuing bonds for municipal works. Lester Perry, Town Clk.

LOS ANGELES, CAL.—The council has been asked to call an election to vote on the question of issuing bonds for the proposed municipal works; estimated cost, $335,000.

KENDRICK, IDAHO.—The chairman of the council, water and fire committee writes us that the town was unable to sell its bonds for the proposed works, to cost about $11,000. The town would, however, like to have works. Population, 800.

LA CHUTE, QUE.—Press reports state that this place is considering the question of municipal works. Population, 2,000.

HINTONBURG, ONT.—W. A. Mason, Village Clk., writes us that an Ottawa company has submitted a proposition to construct works, to cost about $35,000. Other than to consider the proposal no further steps have been taken by the council. Other parties are preparing to submit offers. Population, 2,100.

WINNIPEG, MAN.—It is stated that the citizens voted Nov. 24 in favor of issuing $100,000 in bonds for the proposed new works. Engr., Rudolph Hering, New York.

GRAND FORKS, B. C.—Contractor Davey has let contracts for building water-works, reservoir and power house to Peter Hanna. The reservoir will cost about $1,000 and the power house $1,200.

SEWERAGE.

CAMBRIDGE, MASS.—L. M. Hastings, Cy Engr., has submitted a report on certain defects in the sewerage system, with recommendations for repairing them. E. J. Brandon, Cy. Clk.

PROVIDENCE, R. I.—Bids are asked until Dec. 8 for furnishing and delivering before March 1 about 65,000 ft. of 15 to 16-in. sewer pipe, 1,600 pieces of 15 to 16-in. bends, etc. Robt. E. Smith, Comr. Pub. Wks.

BROOKLYN, N. Y.—Bids are asked until Dec. 9 for constructing a main relief sewer extensions in Reid Ave., and lateral sewers in about 12 other streets; six sureties of from $450 to $8,000. Theo. B. Willis, Comr. Cy. Wks.

RYE, N. Y.—Stevenson Towle, 31 Chambers st., New York, has submitted a report on a system for this place, to cost about $30,000. There will be required about 25,000 ft. of pipe. Sewage disposal plant will be required.

BELLEVILE, N. J.—W. J. Harrison, Verona, N. J., has been awarded the contract for constructing sewers, grading and building roads in Soho. Engr., Chas. W. Leavitt, Jr., 15 Cortlandt St., New York.

MONTCLAIR, N. J.—Bids are asked until Dec. 6 for constructing an 8-in. pipe sewer in James St. H. Trippett, Town Clk.

PATERSON, N. J.—The aldermen have voted to build 3,500 ft. of 24 to 12-in. pipe sewer. Thos. McLean, Cy. St. Comr.

ANNAPOLIS, IND.—An election will be held Dec. 15 to vote on the question of issuing $30,000 in bonds, about $13,000 of which is for sewers and paving.

NEWPORT NEWS, VA.—An election will be held Dec. 21 to vote on the question of issuing $75,000 in bonds for a sewerage system. Engr., Alex. Potter, 137 Broadway, New York. J. A. Massie, Cy. Clk.

MEMPHIS, TENN.—The question of annexing the suburbs of the city and extending the sewerage system and water-works thereto is being considered. The governor has been asked to call a special session of the legislature to authorize the change.

ASHTABULA, O.—Bids are asked until Dec. 11 for constructing a sewer in Russell St., as described in our advertising columns. A. B. Phillips, Cy. Clk.

CINCINNATI, O.—Arrangements are being made by the board of administration for the construction of a trunk sewer in Kemper Lane. Aug. Herrmann, Pres.

CLEVELAND, O.—Bids are asked until Dec. 8 for cleaning the catchbasins in the city for a period of one year. Geo. R. Warden, Dir. Pub. Wks.

SHELBY, O.—Bids are asked until Dec. 27 for constructing 3½ miles of pipe sewers, as stated in our advertising columns. D. V. Wherry, Pres. Sewer Comn., writes us that the work will include 8,000 ft. of 18-in. and 11,000 ft. of 12-in. pipe sewers; average cut, 9 ft.; estimated cost, $13,000. Des. Engr., J. B. Weddell, Mansfield, O.; Clk., W. F. Sonnanstine.

TOLEDO, O.—It is proposed to construct 90 24-in. brick sewers in several streets. D. W. McAleese, Pres. Bd. Councilmen; J. C. Meissner, Pres. Bd. Aldermen.

FOWLER, IND.—We are informed that the city authorities are considering estimates for a system. Population, 1,500.

CHEROKEE, IA.—Boynton & Warriner, Cedar Rapids, Ia., completed plans for a system some time ago, and not recently, as has been reported. About 6,600 ft. of 20 to 6-in. pipe sewers were built in April and May. It is not known when another section of the system will be built.

ST. LOUIS, MO.—B. H. Colby, Sewer Comr., St. Louis, informs us that the following bids were received Nov. 23 for constructing 70 ft. of 86-in. brick sewer: Hernan Construction Co., St. Louis, $1,623, and Harry F. Hernan, St. Louis, $1,552. Both bids were rejected.

ST. LOUIS, MO.—Bids are asked until Dec. 14 for constructing about 2,000 ft. of 30 × 41 to 48 × 72-in. brick and about 16,000 ft. of 30 to 12-in. pipe sewers. Robt. E. McMath, Pres. Bd. Pub. Improvements.

HOUSTON, TEX.—Press reports state that the council on Nov. 22 voted to issue $50,000 in 5% 40-year bonds for sewers, paving, etc.

SPOKANE, WASH.—The following bids were received Nov. 18 for constructing a sewer in Third St.: Breckenridge & Lund, $3,468; Peter Costello, $6,374; J. C. Broad, $7,995; S. A. Eslick & Co., $8,700; Fife & Conlan, $8,997, and E. G. Sherman, $9,994. The bids were rejected and new ones asked. Mayor Olmsted may be addressed.

KASLO, B. C.—G. O. Buchanan, Chn. Water and Sanitary Com., writes us that plans and estimates for a system are under preparation. This is in addition to $16,000 worth of street improvement and water main extensions, which are to be completed this year. Population (1890), 1,500. Des. Engr., E. W. Cummings.

GARBAGE DISPOSAL—STREET CLEANING

BOSTON, MASS.—Bids are asked until Dec. 8 for erecting a crematory or rendering plant on Spectacle Island, Boston Harbor, taking from five different points on the water front of the city all the garbage brought to those points, etc. The contract is to run for a term of 10 years from May 1, the city to have the right to purchase same at the end of five years. Bond, $100,000. Benj. W. Wells, Supt. Sts., City Hall.

BINGHAMTON, N. Y.—L. M. Wilson, Health Comr., writes us that the health board has been agitating the garbage question for some time, and is favorable to a crematory. The matter is now in the hands of the council, and it is probable the question will be submitted to the vote of the people at an early date.

SYRACUSE, N. Y.—The Syracuse Reduction & Mfg. Co. was incorporated with a capital stock of $100,000, to conduct a garbage reduction works and to manufacture fertilizer in Syracuse; directors: John Dunfee, William B. Kirk, Chas. E. Ide, Syracuse; Frederick S. Axtell, Harry F. Turner, Baltimore, Md.; and Sampson P. Bayley, Jr., Washington, D. C. Mr. Dunfee, of this company, was recently awarded the contract for collecting and disposing of the garbage of the city for a period of 10 years. The plant will be built on the Marsh road, within the city limits.

PHILADELPHIA, PA.—The following bids were received Nov. 30 for disposing of the garbage of the city for 1898:

Bidder.	Districts, 1st.	2d.	3d.	4th.	5th.
American Product Co.	$54,200	$59,700	$41,800	$93,900	$91,800
James Curran	.....	.....	.....	95,000	.....
Phila. Incinerating Co	61,500	64,800	48,900	80,000	85,400
Case & Peoples	25,000	40,000	40,000	80,000	84,000
H. P. Connell	32,000	39,800	27,800	57,000	54,000
Irvin Blair	60,800	90,000	62,000	105,000	111,000
G. W. McClintock ...	71,000	85,000	55,000	129,000	130,000

Geo. W. Ruch submitted a bid for cleaning the streets and removing the ashes of the entire city at $560,886, and Edwin H. Nare at $507,997. Other bids will probably be given next week.

WEST NEWTON, PA.—Press reports state that the American Reduction Co.'s works near Griffin Station were destroyed by fire Nov. 24. The loss is complete, except the boiler house. The fire is supposed to have originated from spontaneous combustion in the piles of garbage which come from Pittsburg to be worked into fertilizer here.

CLEVELAND, O.—Bids are asked until Dec. 22 for cleaning the paved streets and alleys of the city for one year. Geo. R. Warden, Dir. Pub. Wks.

TOLEDO, O.—Col. I. D. Smead, of the Smead Furnace & Foundry Co., is stated by local papers to have organized a company to erect a garbage disposal plant of his invention, for this city. Capital stock, $50,000.

YOUNGSTOWN, O.—F. C. Bramn, Cy.Clk., writes us that the city commissioners have invited plans and specifications for a garbage crematory or garbage disposal plant for this city.

CHICAGO, ILL.—The following bids were received Nov. 29 for collecting and disposing of the garbage for a term of five years: Thos. A. Smyth, $2,190,000; Henry McDonald, $2,260,000; Campbell & Turner, $2,367,000; Mulcaire & Burke, 048 West Erie St., $1,800,749; J. H. Burke, $2,500,000; Geo. P. Gilman, $2,495,000; Dowdle & Chamberlin, $2,195,000, and Hanrahan & Downey, $2,776,818. Local papers state that the Mayor is in favor of dividing the contract as follows: 1st District—Mulcaire & Burke, $350,000; 2d District—Dowdle & Chamberlin, $790,000; 3d District—Hanrahan & Downey, $349,313; 4th District—Mulcaire & Burke, $384,509.

MILWAUKEE, WIS.—R. L. Day & Co., 7 Nassau St., New York, have been awarded the issue of garbage disposal bonds of $136,212 at a premium of 13.51%. Wm. J. Filbrants, Comptroller.

MINNEAPOLIS, MINN.—Mayor Pratt, Health Comissioner Avery and Alderman Colburn have been appointed a committee to prepare new specifications for a two-year garbage removal contract. The bids received recently for the work for a period of five years were rejected and new ones will soon be asked. The board of health has quite abandoned the idea of securing a crematory or reduction plant. One suitable for Minneapolis will cost fully $70,000, according to Alderman Colburn, and it will cost about $30,000 a year to operate it.

STREETS AND ROADS.

STONEHAM, MASS.—Bids are asked until Dec. 6 for constructing the Bear Hill entrance road to the Middlesex Fells reservation, Stoneham. The work will include 4,900 sq. yds. of gravel roadway, etc. Wm T. Pierce, Engr., Metropolitan Park Comn., Ames Bldg., Boston.

PROVIDENCE, R. I.—Bids are asked until Dec. 8 for furnishing from 1,000,000 to 3,000,000 hard body paving blocks. Robt. E. Smith, Comr. Pub. Wks.

HARWINTON, CONN.—This town will soon advertise for bids for the regrading of two sections of the Harwinton-East Litchfield Road. C. S. Birge, 1st Selectman, Harwinton; S. B. Patterson, Engr., 101 Main St., Torrington, Conn.

GOSHEN, CONN.—This town will advertise for bids for regrading two sections of the Goshen-Torrington Road. W. E. Gaylord, 1st Selectman, Goshen, Conn.; S. B. Patterson, Engr., 101 Main St., Torrington, Conn.

BROOKLYN, N. Y.—Bids are asked until Dec. 7 for repaving portions of 21 streets with asphalt; sureties required, $1,000 to $15,000.—Bids are asked until Dec. 6 for macadamizing portions of Kings Highway, Cropsey Ave. and West 18th St.; sureties, $6,500 and $8,500. N. P. Lewis, Engr.; Hubert L. Smith, Comr.—Bids are asked until Dec. 9 for the Shore Road construction, plan No. 3, from Bay Ridge Ave. to First Ave., as stated in our advertising columns. Elijah R. Kennedy, Pres., Shore Road Comn., City Hall.

BUFFALO, N. Y.—Reports state that the German Rock Asphalt Co. has received a contract at $47,983 for paving Niagara St. with asphalt.

BUFFALO, N. Y.—Bids are asked until Dec. 8 for grading Florence St. from Woodward Ave. to Parkside Ave. R. G. Parsons, Secy. Bd. Pub. Wks.

FLORAL PARK (L. I.), N. Y.—Local papers state that this town will issue $50,000 in bonds for macadamizing New York Ave. for a distance of four miles.

CAMDEN, N. J.—Bids are asked until Dec. 8 for constructing a stone road 1½ miles long in Camden county, as stated in our advertising columns. E. T. Gill, Chn. Road Com.

HOBOKEN, N. J.—It is reported that the board of freeholders has authorized the extension of the Hudson County Boulevard from its terminus to 4th St., in this city.

JERSEY CITY, N. J.—Local papers state that the Barber Asphalt Paving Co. has been awarded the contract for paving Fairview Ave. from Bergen Ave. to the Boulevard with asphalt.

MONTCLAIR, N. J.—Bids are asked until Dec. 13 for constructing a blue stone flag walk on Maple Ave., from Bloomfield Ave. to Lincoln St. H. Trippett, Town Clk.

ANNAPOLIS, MD.—This city will vote Dec. 14 on the question of issuing $30,000 in bonds, part of which will be used for paving.

BALTIMORE, MD.—Bids are asked until Dec. 9 for grading, paving and curbing 21st St., between Guilford Ave. and Barclay St. W. A. Hanway, Cy. Comr.

NEWPORT NEWS, VA.—Bids are asked until Dec. 17 for grading, etc., in Warwick Ave. and 21st St., according to reports. J. A. Massie, Cy. Clk.

ALEXANDRIA, VA.—It is proposed to repave King St. from Fairfax to Royal Ave. with Belgian block or brick at a cost of $2,515.

CINCINNATI, O.—Bids are asked until Dec. 22 for grading and paving Spring Grove Ave., from Dodsworth Ave. to the northeast corporation line, with asphalt. Aug. Herrmann, Pres. Bd. Administration.

CINCINNATI, O.—Bids are asked by the county commissioners until Dec. 29 for a superstructure masonry and fill on the Weihe road. E. L. Lewis, County Audr.

HAMILTON, O.—Bids are asked by the city clerk for the purchase of $27,300 of street improvement bonds.

ST. MARY'S, O.—I. B. Empie, Fort Wayne, Ind., is reported to have been awarded the contract for paving certain streets in this city at about $25,000.

VEVAY, IND.—Bids are asked until Dec. 9 for constructing three gravel roads in Switzerland county. J. E. Hart, County Audr.

WABASH, IND.—Bids are asked until Dec. 27 for 10,500 sq. yds. for lake asphalt paving. Robt. P. Doods, Cy. Engr.

ANN ARBOR, MICH.—Arrangements are reported as being made for paving Main St., from Catherine to William St., with brick, at a cost of $20,000.

ESCANABA, MICH.—P. V. Linden, County Clk., writes us that the question of issuing $175,000 in bonds for county road purposes was defeated by the board of supervisors at the annual meeting. On this account the question will not be submitted to the vote of the people for at least a year.

BERKELEY, CAL.—G. H. Chick, Supt. Sts., writes us that the proposed grading, curbing and macadamizing of Spruce St. is being advertised; estimated cost, $5,000; culvert, $1,000. The contract for macadamizing Grove St. has been let to D. Lambert at $30,000; and that for the grading of the street to J. T. Cochran & Co. at $6,000. The town proposes to buy a steam road roller.

OAKLAND, CAL.—The East Oakland Paving Co. is reported to have submitted the lowest bid for wooden block paving in East 12th St. at $41,164.

MANUFACTURING PLANTS.

CLINTON, MASS.—It is reported that a 3-story brick factory building will soon be erected in this town for the manufacture of fancy worsteds. No contracts have yet been awarded. It is said that a 50-HP. engine and boiler will be installed and sufficient looms to give employment to about 40 hands put in place by March 1, 1898. Mgr., George S. Giffin; Treas., Charles Frazer.

ALBANY, N. Y.—James B. Lyon contemplates the erection of a 6-story factory building near the public market, at a cost of about $60,000.

BROOKLYN, N. Y.—The contract for erecting the new stock house for the Claus Lipsius Brewing Co., of this city, to cost about $50,000, has been awarded to R. W. Hildreth & Co., 50 Broadway, New York; Arch., H. Steinmann, 220 Broadway, New York.

STILLWATER, N. Y.—The shoddy mill of the Cunningham Bros., at this place, was destroyed by fire, Nov. 19, causing a reported loss on building and machinery of $80,000. Owners, North & Doyle, of Cohoes, N. Y.

TROY, N. Y.—Bids are now being received by John Connors for the erection of a 5-story building at 669 to 675 River St., to be used for grinding dry paints. The factory will be equipped with crushers and mills for pulverizing paints, also dryers and furnaces for roasting ochers and other ores. The work will be done under the direct supervision of M. Connors. Press reports state that the John Stanton Brewing Co., on 5th Ave., are having plans prepared for a large store house building.

UTICA, N. Y.—H. C. Collis, of this city, is said to be interested in the proposed erection of a beet sugar factory in Utica.

BAYONNE, N. J.—Press reports state that the Pacific Coast Borax Co., of California, purposes to erect a plant for the manufacture of borax at this place. The first building will be a 4-story structure, to cost about $200,000. Pres., Frank M. Smith.

CHESTER, PA.—Jackson & Son were awarded the contract Nov. 25 for building a 3½-story addition to the brewery of the Chester Brewing Co., at 2d and West Sts., at $5,297. It is said that plans are also being prepared for a new ice plant.

LANCASTER, PA.—Brenneman & Son, of Lancaster, have been awarded the contract for erecting a new 4-story silk mill, 307 x 47 ft., for Stenli & Co., of Zurich, Switzerland.

PHILADELPHIA, PA.—It is reported that the Pennsylvania Sugar Refining Co. contemplates erecting a large 6-story addition, to be used as a warehouse and refining room, to its present plant on the Shackamaxon St. wharf.

SHARON, PA.—Press reports state that the plant of the American Steel Casting Co., north of this town, will be improved at a cost of $200,000.

CHARLOTTE, N. C.—We are informed that H. A. Cook will soon erect a cotton batting factory as an addition to his bagging and tie factory in this city, and that a 36-in. cotton picker and six 36-in. cotton cards will be purchased.

WILMINGTON, N. C.—It is reported that T. J. Callett, Isaac Ratowsky and others will establish an ice manufacturing plant at this place.

CHESTER, S. C.—J. C. Hardin, the new receiver of the Catawba Mill, at this place, has been authorized by the court to put in such additional machinery as is needed to make the plant complete.

SAVANNAH, GA.—We are informed that as a preliminary to the establishment of the proposed Chatham cotton mills in this city, an issue of $100,000 in bonds must be disposed of. Among those interested are: J. L. Whatley, of Savannah, and Samuel Hale, of 36 West 32d St., New York, N. Y.

CALHOUN, GA.—The steam cotton gin of J. C. Johnson was destroyed by fire Nov. 20. Reported loss on building and machinery, $5,000.

KEY WEST, FLA.—Bids are asked until Dec. 22 for erecting a new machine shop at the U. S. naval station at this place. E. O. Matthews, Ch. of Bureau of Yards and Docks, Washington, D. C.

EAST LIVERPOOL O.—Press reports state that W. H. Banfield, of the Irondale Tin Mills, Nov. 29, purchased a 20-acre tract of land in this city as a site for a sheet mill and steel plant to cost $250,000. It is said that work on the buildings will commence soon after Jan. 1, and that 400 men will be employed at first.

REDKEY, IND.—The Marietta glass factory has been destroyed by fire; reported loss, $35,000. Mr. Butler, Mgr., is reported as saying that the company will rebuild at once.

CARROLLTON, IA.—Plans have been prepared for Mallory & Thayer for a creamery building, 50 x 100 ft., a refrigeratory plant and other buildings, to cost about $100,000. Archs., Dwen & White, 123 to 185 Dearborn St.

HORR, MONT.—It is reported that the Montana Coal & Coke Co. is preparing to improve its plant by putting in new coke ovens, 100-ton smelter, etc.; estimated cost, $150,000.

ST. LOUIS, MO.—A fire in this city Nov. 23 destroyed the warehouse of the Ravenswood Distillery Co., causing a reported loss of $100,000; insurance, about $75,000.

SEATTLE, WASH.—The planing mill of A. S. Kerry was destroyed by fire Nov. 12, causing a loss of $45,000; insurance, $14,000.

LOS ANGELES, CAL.—E. H. Dyer & Co., Cleveland, O., have been awarded the contract for constructing an enlargement of the refinery of the Los Almitos Sugar Co. in this city. The daily capacity of the new factory will be 1,000 tons.

STOCKTON, CAL.—Reports state that a new brewing plant will be erected in this city by eastern capitalists, to cost about $100,000. Clark & Henery, of Stockton, are said to be the local agents.

SHERBROOKE, QUE.—Press reports state that about $75,000 will be spent by the Quebec Central R. R. Co. in alterations and additions to its shops.

GAS PLANTS.

BINGHAMTON, N. Y.—Bids are asked until Dec. 20 for furnishing 175 or more naphtha lights for one, two or three years, as stated in our advertising columns. B. W. Mosher, Cy. Clk.

TIFFIN, O.—Reports state that the Northwestern Gas & Electric Light Co. has offered the council $88,000 for the natural gas plant, and has also submitted a proposition to furnish the town with artificial gas by the Hall process. J. F. Moffett and A. M. Whitney, New York, are interested.

INDIANAPOLIS, IND.—Bids are asked by the board of public works until Dec. 6 for furnishing and maintaining 200 vapor street lights in this city for the year ending Dec. 31, 1898.

DENVER, COLO.—Local papers state that a proposition is being considered by the council for the purchase or lease of the Denver Consolidated Gas Co.'s plant.

PALO ALTO, CAL.—Reports state that bids will soon be asked by the trustees for a franchise to install a gas plant for lighting, heating, etc., in this place.

NEW COMPANIES.—Buffalo City Gas Co., Buffalo, N. Y.; $7,000,000; to manufacture gas for heating and lighting; Chas. D. Lithgow, Edward D. Phillips, Edward J. Graets, Frederick W. Schramm, John M. Snyder, Emerson McMillan, Jr., New York; Geo. T. Thompson, Jersey City; Cantine T. Scoville, Patrick Vaughan, Brooklyn.

People's Gas Co., Camden, N. J.; $325,000, with $162,500 paid in; John F. Starr, Jr., Maurice A. Rogers, J. R. Eastback and Louis T. Derousse, Camden, N. J.; Lewis Perrine, Trenton, N. J.

Harpers Ferry Oil Co., Wheeling, W. Va.; $250,000; George Kidney, Henry Stolze, Albert Stolze, C. H. Driehorst, J. L. Porter, Wheeling.

Missouri Acetylene Light Co., St. Louis, Mo.; $750,000; to manufacture carbine and acetylene gas; Robert Owen, Hart A. Fisher, William H. Bronaugh, Wiley T. Wisdom, St. Louis.

Paintsville Gas, Oil & Mineral Co., Paintsville, Ga.; $2,000.

MISCELLANEOUS CONTRACTS.

TELEPHONES.—Raleigh, N. C.—Our correspondent informs us that the Bell Telephone Co. is about to extend its lines at a cost of about $5,000.

STREET LAMP FURNISHINGS.—Cleveland, O.—Bids are asked until Dec. 8 for furnishing iron posts, lanterns and supports for street lamps. Geo. R. Warden, Dir. Pub. Wks.

DIKE.—Leavenworth, Kan.—Local papers state that a petition has been presented for the construction of a dike to protect the farmers from the overflow of the Missouri River.

CONDUITS.—Kansas City, Mo.—Local papers state that the Missouri & Kansas Telephone Co. will expend about $100,000 next spring for additional wiring, conduits, etc. Alonzo Burt, Gen. Mgr.

SAILING SHIPS.—Parties having for sale second-hand three-mast schooners, barks, or other sailing ships on the Atlantic coast, will kindly address "R. D.," care Engineering News, New York.

DRY DOCK.—Brooklyn, N. Y.—Local papers state that a syndicate composed of Brooklyn capitalists is being organized for the purpose of constructing a floating dry dock, suitable for ocean liners and war vessels.

CANAL WORK.—Oswego, N. Y.—Press reports state that the Walter Bradly Co. has received a contract for constructing and enlarging Lock No. 18 of the Oswego Canal, at a cost of $80,000. Work will begin at once.

SHIP REPAIRS.—NEW YORK, N. Y.—Bids are asked by the Nautical School Committee, Board of Education, 146 Grand St., until Dec. 10 for sundry repairs to the school ship "St. Mary's." Aug. P. Montant, Chn.

DOCK AND HARBOR IMPROVEMENT.—Bristol, England.—Reports state that U. S. Consul Boyle has reported that the municipality has decided to spend $7,500,000 for the improvement of the docks and harbor of this place.

CANAL.—MONTEREY, MEX.—Bids are asked until Dec. 27 for constructing about 10 miles of canal to be about 8 ft. wide and 4 ft. deep, at the head waters of the San Diego River. Lorenzo G. Trevino, Plaza de Bolivar No. 5, Monterey.

IMPROVING GROUNDS.—Charleston, S. C.—Bids are asked until Dec. 15 for the labor and materials necessary to improve the grounds of the U. S. public building in this city. Jas. Knox Taylor, Supervising Arch., Washington, D. C.

HOOK AND LADDER TRUCK, ETC.—Baltimore, Md.—Bids are asked until Dec. 6 for furnishing a hook and ladder truck, same to be supplied with two 35-gallon Holloway Chemical Tanks and equipment. A. Hoxzel Cathcart, Pres. Fire Bd.

TELEPHONE EXCHANGE.—Kings Park (L. I.), N. Y. —The following bids were received for a telephone exchange at the state hospital in this place. J. F. Buchanan & Co., New York, $4,877; Geo. Wiederman, New York, $5,475.

DRAINAGE.—Raymond, Ill.—Reports state that J. W. Dappert is making surveys for the drainage of about 9,000 acres near Raymond. The commissioners are J. D. Young, Harvel, Ill. Edward Grimes and Robt. Kennedy, Raymond.

REPAIRING FIRE ENGINES.—New York, N. Y.—Bids are asked by the Fire Department, 159 East 67th St., until Dec. 10 for the repair of Clapp & Jones fire engines No. 491, security $1,100; No. 41?, security $2,600; No. 4??, security $900.

SIDEWALKS.—Niles, O.—The following bids were received Nov. 17 for furnishing and laying stone sidewalks on Robbins Ave. C. Butterworth, Cleveland, O., 2-in. independent sawed stone, 11.9 cts. a ft., 3-in. natural flag, 13.88 cts.; 6-in. crosswalk, 18.9 cts.; 2-in. sawed natural stone, 12 cts.; relaying of stone, 2½ cts.; H. S. Hake, 13¼ cts., 15 cts., 19 cts., 3⅛ cts., 4 cts.; A. Maggon, 12½ cts., 14½ cts., 19½ cts., 12⅞ cts., 3⅛ cts., respectively.

FURNISHING AND LAYING CONDUITS.—New York, N. Y.—Chas. H. T. Collis, Comr. Pub. Wks., 150 Nassau St., received the following bids Nov. 24 for furnishing, delivering and laying 48-in. cast-iron conduit in Webster Ave.; the work to be completed within 400 days:

INDUSTRIAL NOTES.

THE MURRAY IRON WORKS CO., Burlington, Ia., has sold a 450-HP. Corliss engine to the city of Hannibal, Mo.

THE TOMKINS COVE STONE CO., Tomkins Cove, N. Y., during the winter will very largely increase the capacity of its stone-breaking plant.

THE ALBANY BOILER WORKS, Albany, N. Y., has received an order for boilers of 500-HP. for the Chelsea Jute Works, Greenpoint (L. I.), N. Y.

THE NEWARK LIME & CEMENT MFG. CO., Rondout, N. Y., is preparing to erect a large stone-crushing plant in addition to its present plant.

Bids Received at New York, N.Y., Nov. 24, for Furnishing and Laying Water Conduits.

Quantities.		Shanley & Ryan, 26 Tompkins St.	Manhattan Const'n Co., 11 Broadway.	National Contracting Co., 11 Broadway.	M. J. Dady, Brooklyn, N. Y.	Jno. Cornwell Jr., 69 E. 127th St.	T. A. Gillespie Co., Pittsburg, Pa. & 26 Cortlandt St.	I. A. Hodge, 18 Broadway.	Norton & Dalton, 147 E. 125th St.	Wm. P. Baird, 330 E. 63d St.	Thielmann & Smith, 411 Lenox Ave.	Martin Lipps, Beekman Ave. and Beech Terrace.
Rock excavation	3,000 cu. yds.	$1.50	$1.50	$2.25	$2.00	$2.00	$1.70	$3.00	$2.75	$2.75	$0.50	$2.75
Earth excavation	8,000 " "	.30	.40	.20	.28	.20	.25	.20	.25	.25	.50	.30
Filling	10,000 " "	.10	.20	30	.17	.10	.16	.25	.20	.12	.50	.15
Furnishing and delivering straight pipe	2,400 tons....	18.50	21.00	19.80	19.50	17.00	18.60	21.00	18.35	20.00	20.00	19.25
Branches and castings	50 "	39.50	50.00	40.00	50.00	35.00	42.25	45.00	45.00	43.00	45.00	42.00
Laying 48-in. pipe	5,300 lin. ft..	2.50	1.00	1.00	.95	2.65	.88	1.33	1.10	1.30	1.10	1.25
" 12-in. "	1,500 " "	.30	.25	.25	.35	.40	.25	.40	.40	35.00	.30	.25
" 6-in. "	200 " "	.20	.25	.15	.30	.20	.20	.30	25	.25	.20	.15
Furnishing, laying and setting:												
12-in. stop-cock and box	4 each...	50.00	75.00	50.00	40.00	50.00	42.80	45.00	35.00	50.00	50.00	40.00
6-in. " " "	4 " ...	30.00	50.00	25.00	30.00	30.00	26.75	30.00	25.00	25.00	40.00	25.00
Double-nozzle hydrants	3 " ...	55.00	45.00	50.00	60.00	75.00	50.00	100.00	48.00	65.00	50.00	50.00
Brick work	50 cu. yds.	11.00	11.00	12.00	12.00	.01	10.00	12.00	10.00	12.00	12.00	12.00
Concrete	20 " "	7.00	4.00	7.50	7.00	.01	4.25	10.00	4.50	4.50	4.00	4.00
Furnishing, laying and setting blow-offs	2 each...	15.00	50.00	30.00	15.00	20.00	20.00	100.00	15.00	15.00	10.00	25.00
Total		$69,220	$69,690	$71,015	$66,000	$66,420	$61,585	$75,050	$66,024	$70,280	$68,280	$68,620

DRAINAGE.—Harvel, Ill.—It is reported that a drainage district of about 2,800 acres is being surveyed by J. S. Michels, Taylorville, Ill. John Kruger and John Wilson, of Harvel, and Frank Paul, of Whiteoak, Ill., are the commissioners.

TELEPHONE SYSTEM.—New York, N. Y.—Wm. S. Holmes, Detroit Telephone Co., is reported as stating that a party of New York capitalists are about to organize an independent telephone company with a possible capital stock of $15,000,000, to operate in Greater New York.

CABLE.—San Francisco, Cal.—Reports state that a cable is proposed to connect the United States with the Hawaiian Islands, Japan, China and Australasia, by the Pacific Cable Co., now being organized. Directors: J. Pierpont Morgan, New York; Edmund L. Bayles, J. Kennedy Tod, Rear-Admiral John Irwin, U. S. N., and James Scrymser.

STEEL BARGES.—St. Louis, Mo.—Reports state that a committee consisting of Henry Langenburg, S. M. Kennard, Murray Carleton, I. H. Lichberger and Henry S. Potter has been appointed by the Merchants' Exchange to formulate plans and organize a company for the establishment of a line of steel barges from this city to the Gulf of Mexico.

WHARF.—Vallejo, Cal.—The following bids were received by the trustees Nov. 10 for the reconstruction of the Virginia St. wharf: Schmidt Construction Co., $8,800; Cotton Bros. & Co., Oakland, Cal., $8,100; Ray Building & Construction Co., $8,690; Healey, Tibbitts & Co., $8,193; California Bridge Co., $7,937; J. A. McMahon, $8,674; Johnson & Beterson, $7,580; Thompson Bridge Co., $8,300; Darby Laydon & Co., $7,897.

DREDGING.—New York, N. Y.—The following bids were received by the dock department, Pier A, Nov. 24, for dredging at the foot of Murray St., North River; (1) R. G. Packard, 132 Pearl St. (awarded contract); (2) Morris & Cumings Dredging Co., 22 State St.:

		1.	2.
Mud dredging,	...about 23,000 cu. yds.	$0.19	$0.20
Crib "	... " 4,050 " "	.92	1.00

RIVER WORK, ETC.—Sacramento, Cal.—It is reported that J. C. Smith, Stockton, Cal., has been awarded the contract, Nov. 15, for dredging in the San Joaquin River, at 4⅝ cts. a cu. yd. The work will require the removal of 292,000 cu. yds. of earth. Only two bids were received by the commissioner of public works for dredging the Newton Shoals in the Sacramento River, at 14.00 cts. and 17 cts. a cu. yd. It is probable that the latter bids will be rejected on account of being too high. Bids were also received for building jetties, piling, etc., on the Sacramento River. Jno. Markley, Secy. Auditing Bd., Capitol Bldg., Sacramento. E. E. Leake, Comr.

HAULING WATER PIPE.—Westfield, Mass.—The water commissioners received the following bids last week for hauling about 1,940 tons of water pipe over the line of the new extensions: Cordner Bros., Chicopee, Mass., 85 cts. a ton, total, $1,649; Geo. W. Smith, 91½ cts.; Michael Arnold, Granville, Mass., $1.13; Fred T. Ley & Co., Springfield, Mass., $1.18; C. H. Gehle, $1.23⅝; George A. Quance, $1.29; Dwight Parsons, $1.48.

IMPROVING POND.—New York, N. Y.—The department of public works received the following bids Nov. 24 for improving White Pond and outlet in Kent, the work to be completed within 500 days:

THE JAPAN MAIL STEAMSHIP CO., Tokio and Yokohama, Japan, is said to be about to double its European service by the construction of 12 new steamships of 6,000 tons each.

THE DUPLEX MFG. CO., Superior, Wis., is building a Cook rotary engine, according to report, which is experimental, and is designed to test certain theories in regard to this class of engines.

THE BROOKS LOCOMOTIVE WORKS, Dunkirk, N. Y., has received an order for six freight locomotives for the Cleveland, Cincinnati, Chicago & St. Louis Ry., to be delivered early next year.

WILLIAM SKINNER & SONS, Baltimore, Md., are reported to have a contract for two harbor freight lighters, each 72 ft. long, 23 ft. beam and 7½ ft. deep, for the Baltimore Storage & Lighterage Co. of that city.

THE RICHMOND LOCOMOTIVE WORKS, Richmond, Va., is reported to have just delivered to the Southern Ry. two 10-wheeled, 80-ton locomotives to be used for passenger traffic between Washington and Atlanta.

THE ROYAL ELECTRIC CO., Montreal, Que., has received a contract from the city of Fort William for apparatus and machinery necessary for the construction of an electric lighting plant at that place, to cost $13,000.

THE MINNEAPOLIS IRON AND STEEL ROLLING MILLS, Columbia Heights, Minn., will resume operations at once with about 300 employes, according to report. A new open-hearth steel plant will be built in the spring.

THE EQUITABLE GASLIGHT CO., New York, N. Y., has taken steps toward a consolidation with the New York and East River Gas Co., and the New Amsterdam Gas Co., also of the same city. The officers of the first-named company are quoted as stating that neither the quality nor the price of gas will be altered by the consolidation.

JONES & LAUGHLIN, Pittsburg, Pa., are reported to have given notice to their 3,000 iron workers that, commencing Dec. 1, wages will be increased 10 per cent., thus restoring the wages to the scale in use some months ago.

THE VULCAN IRON WORKS, Chicago, Ill., has received an order from the Chicago & Northwestern Ry. Co. for the operating machinery and turntable of its new bridge at Winona, Minn., over the Mississippi River, this making the eighth drawbridge across that river for which this company has furnished the machinery. The superstructure will be built by the Detroit Bridge & Iron Works, Detroit, Mich.

Bids Received at New York, N. Y., Nov. 24, for Improvements to White Pond.

Quantities.		Manhattan Const'n Co., 11 B'way.	C. W. Smith, 110 E. 50th St.	W. J. Flanagan, Mt. Vernon, N.Y.	B. J. Sullivan, Philadelphia.	Twiname & Palmer, Carmel, N.Y.	Tripp & Lounsb'ry Port Chester, N.Y.	P. F. Curran, New Castle, N.Y.	J. M. Waddle, 649 Prospect Ave.	Thos. O'Hearn, Yonkers, N.Y.	John McQuade, 1328 Lexington Ave.	Oscar Miersch, Purdy Station, N.Y.	Jno. P. Dooley, North Castle, N.Y.	Frowley & Rooney, 180 E. 95th St.
Grubbing and cleaning,	100 acres...	$20.00	$12.00	$8.00	$100.00	$15.00	$10.00	$20.00	$70.00	$15.00	$10.00	$19.50	$15.00	$100.00
Rock excavation	1,000 cu. yds.	2.00	1.20	.80	1.25	1.50	1.20	1.20	2.00	1.25	.75	1.25	1.20	1.25
Earth excavation	16,000 " "	.40	.31	.22	.75	.25	.25	.25	.53	.30	.25	.40	.20	.40
Embankment and rip-rap	16,000 " "	.40	.34	.22	.70	.25	.50	.35	.58	.30	.35	.44	.35	.40
Cut-stone masonry	25 " "	12.00	29.00	20.00	20.00	27.00	35.00	40.00	33.00	30.00	15.00	20.00	35.00	12.00
Ashlar masonry	25 " "	8.00	8.00	10.00	12.00	9.50	10.00	12.00	11.00	10.00	9.00	16.00	10.00	10.00
Stone masonry	200 " "	6.00	5.00	4.20	6.00	6.00	4.50	6.00	7.75	6.00	4.25	5.00	4.50	5.48
Concrete masonry	50 " "	6.00	6.00	5.00	6.00	4.00	5.00	6.00	7.00	6.00	5.00	5.50	5.50	5.00
Dry stone wall	6,000 " "	2.00	2.25	2.18	2.50	2.00	2.00	2.50	3.50	2.50	1.75	2.75	2.50	3.40
Fence walls, fndatns, etc.	40,000 " "	1.50	.68	.65	.79	.55	.64	.05	1.47	.68	.05	.62	.60	1.78
Sodding	2,400 sq. yds.	.30	.30	.20	.50	.25	.30	.45	.25	.25	.20	.42	15.00	50.00
Oak and chestnut lumber	10 M. ft...	40.00	47.00	45.00	30.00	25.00	40.00	40.00	35.00	25.00	25.00	52.00	40.00	50.00
Tearing down houses and grading ground....		2000.00	300.00	...	2,500.00	200.00	1.00	400.00	1700.00	10.00	350.00	1,800.00	650.00	50.00
Total		$94,320	$56,815	$51,000	$87,950	$48,837	$55,696	$55,480	$112,760	$56,410	$51,080	$64,243	$54,710	$122,868

TRAVELING CRANE.—Boston, Mass.—The following bids have been received by the Metropolitan Water Board for furnishing the Chestnut Hill pumping station with a traveling crane: Pauley & Harnischfeger, Milwaukee, $1,550; Brown Hoisting & Conveying Machine Co., Cleveland, $1,970; Boston Bridge Works, Boston, $2,200; Berlin Iron Bridge Co., East Berlin, Conn., $2,250; Edward Kendall & Sons, Cambridge, Mass., $2,350.

CONTRACT PRICES.

GRADING, CURBING, ETC.—New York, N. Y.—The following bids were received Nov. 23 by C. H. T. Collis, Comr. Pub. Wks., 180 Nassau St., for regulating, grading and curbing Sherman Ave., from 10th Ave. to Kingsbridge road:

Quantities.	Chas. W. Collins, Brook Ave & 166th St., $57,310.	W. J. Rodgers, 26 Cortlandt St., $56,748.	Thos. Murray, 1426 Amsterdam Ave., $65,298.	P. J. Duffy, E. 132d St., nr. St. Ann's Ave., $58,854.	Warren-Scharf Asp. Con. Co., 81 Fulton St., $58,051.	A. C. Chenoweth, 41 East 59th St., $73,068.
Earth excav. 2,060 cu. yds.	$0.00	$0.01	$0.40	$0.30	$0.30	$0.40
Rock excav. 1,914 " "	.69	1.00	.90	.98	1.00	1.50
Filling, surf. level:						
Above ....80,503 " "	.40	.35	.44	.54	.33	.40
Below	...	.40	.10	100	600	100
Furn. and setting:						
Curb ..... 7,050 lin. ft..	.55	.50	.65	.40	.64	.52
Flagging .28,120 sq. ft...	.20	.20	.23	.19	.21	.30
D.s. bx clvrt 125 lin. ft..	3.00	4.00	2.00	.10	2.00	5.00
D. rub. mas. 7,963 cu. yds.	1.50	2.00	1.85	.50	2.00	3.00
Days	150	300	365	168	500	300

ASPHALT STRIPS.—Brooklyn, N. Y.—The following bids were received Nov. 22 for laying asphalt strips on Third St., from Smith St. to Fifth Ave.: Cranford & Co., for asphalt pavement, complete, sq. yd., $1.75; repairing Belgian pavement, sq. yd., 35 cts.; Eastern Bermudez Asphalt Paving Co., asphalt pavement, $1.40; repairing Belgian pavement, 35 cts.; Brooklyn Alcatraz Asphalt Co., asphalt pavement, $1.05; repairing Belgian pavement, 30 cts. Theo. B. Willis, Comr. City Wks.

DEEP WELL.—De Kalb, Ill.—We are informed that the following bids were received Nov. 17 for sinking a deep well, as advertised in Engineering News; Engr., L. B. Merriam, De Kalb; Cy. Clk., E. A. Porter:

Bids Received at De Kalb, Ill., Nov. 17 for Sinking a Deep Well.

Bidder.	1.	2.	3.	4.	5.	6.	7.	8. 13 ins.	8. 14 ins.	8. 15 ins.
J. P. Miller & Co., Chicago, Ill	$3.00	$3.10	$3.50	$1.50	$0.35	$0.55	$0.55	$1.00	$1.75	$2.50
S. Swanson, Minneapolis, Minn.	3.50	3.75	4.00	1.45	.45	.25	.65	2.50	2.75	3.00
Frank M. Gray, Milwaukee, Wis.	3.50	3.70	4.05	1.47	.40	.60	.60	2.00	2.25	2.50
Wm. H. Gray & Bro., Chicago, Ill.	3.75	3.90	4.25	1.75	.50	.75	.90	4.00	4.50	5.00
Keystone Drilling Co., Beaver Falls, Pa.	7.00	8.00	9.00	3.00	1.00	3.00	1.50	4.00	5.00	6.00
S. B. Geiger, Chicago, Ill.	3.65	3.80	3.95	1.85	.85	2.30	.95	2.60	2.75	2.95

1. For boring well in drift from surface of ground to top of rock and casing the same with lap-welded steel pipe, of 13-in. nominal inside diameter, of standard weight, and furnishing all labor and material for the same, a lin. ft.; 2. For 14-in. pipe; 3. For 15-in. pipe; 4. For boring 6-in. well in rock from top of rock to any depth desired by the city, not less than 600 ft. nor more than 1,100 ft. below the top of the rock and furnishing all labor and material for the same, a lin. ft.; 5. For casing any portion of the 6-in. well above, with 5⅝-in. nominal inside diameter inserted joint casing; 6. For reaming any portion of the 6-in. well from the top of the rock downward to an internal diameter of 8 ins.; 7. For casing any portion of the well in the rock which has been reamed to 8 ins., with 7⅝-in. nominal inside diameter inserted joint casing; 8. For reaming any portion of the well in the rock from the top of the rock downward, to the following diameters, but in no case is the well to be reamed larger than the casing in the drift—13 ins., 14 ins. and 15 ins.

For other Contract Prices see page 210.

THE ACME POWDER CO.,
MANUFACTURERS OF EXPLOSIVES,
806 DUQUESNE WAY, PITTSBURG, PA.

EXPLOSIVES ARTHUR KIRK & SON, PITTSBURG, PA.
Powder, Dynamite, Rock Drills, Air Compressors, Rock Breakers, Safety Fuses, Electric Batteries, Miners' Squibs.

COLUMBIA CONSTRUCTION CO.
Importers and Refiners of TRINIDAD ASPHALT FOR STREET PAVING.
Main Office, 35 HERALD BLDG., SYRACUSE, N.Y. New York Office, 1210 LORD'S COURT BLDG., 27 WILLIAM ST.
Refinery at Jones' Point.

UTICA PIPE FOUNDRY CO.
CHARLES MILLAR & SON, Selling Agents, UTICA, N. Y.
Cast Iron Pipe and Specials, Hydrants, Gates, Pig Lead, etc. AKRON SEWER PIPE. Lead Pipe. Plumbers' Materials

"TOO MANY APPLICATIONS."

(THE ADVERTISEMENT COST JUST $5.)

253 Broadway, New York, Nov. 8, 1897.

Engineering News Publishing Co.,
New York.

Gentlemen:—In regard to the extension of time for receiving bids for the Toms River waterworks, I wish to say that I shall not advertise this work any further, as I have had too many applications already.

In answer to the original notice printed in your paper of Oct. 28, at least 75 applications for specifications of above work were directly traceable to the notice printed in your paper, and many more were probably due to the same. The 50 copies of specifications were quickly exhausted and I do not desire to have any more applications.

I shall, however, be pleased to have you advertise any future work for which I wish bids.

Yours truly,
CHARLES J. EVERETT, JR.
Mechanical Engineer.

MUNICIPALITIES Having Contracts To Let should address T. W. KINSER & SONS, 609-613 Chicago Stock Exchange, Chicago.
SPECIALTIES: Sewers, Water-Works, Paving Railroads, Fills, Excavating and Masonry.

THE T. A. GILLESPIE COMPANY, Engineers and Contractors.
Pittsburg Office: Westinghouse Bldg.
New York Office: Havemeyer Bldg.
Manufacturers of RIVETED STEEL PIPE.

Phœnix Construction Co., 908 Fisher Building, Chicago.
We do all classes of heavy construction; Water-Works, Electric and Steam Railroads, Sewers, etc. We invite correspondence.

Chimney Tops. THE KENNEDY-KLING CO. SEWER PIPE TORONTO, OHIO. BRANCH-150 FRANKSTOWN AVE PITTSBURG, PA. Flue Lining.

WATER WHEELS
Impulse or Turbine Wheels furnished or installed for large electrical transmission and mill plants as well as for domestic lighting and power in small units.
Estimates furnished for hydraulic machinery of every description along with electrical apparatus if desired.
American Impulse Wheel Co. of N.Y.
120 LIBERTY STREET.

FOR INFORMATION ABOUT
U. S. MAIL CHUTES
WHICH ARE
A necessity in Office Buildings and Hotels, write to the sole makers,
THE CUTLER MFG. CO., ROCHESTER, N.Y
PATENTED. AUTHORIZED.

CORNELL'S CASTINGS
½ LB. TO 50 TONS
CAPACITY 200 TONS PER DAY.
WEST POINT FOUNDRY AND NEW YORK.
COLUMNS, STAIRS, FRONTS, MACHINERY LIGHT & HEAVY.
— OFFICE —
26TH ST. & 11TH AVE N.Y.

Mention ENGINEERING NEWS.

Columbus Office: 812 North High St.
COLUMBUS SEWER PIPE CO. COLUMBUS, OHIO.
Quality Unsurpassed. Write for Prices.
Chicago Office: 918 Chamber of Commerce.

LAYING 20-IN. PIPE.

NEW BRITAIN, CONN.

Proposals for laying a double twenty-inch cast-iron pipe line will be received by the Board of Water Commissioners of the city of New Britain, Conn., until Tuesday noon, December 7, 1897.

A certified check for $2,000 and a bond in the sum of $15,000 will be required. Specifications and form of proposal can be obtained at the office of the Water Board, 86 West Main St., New Britain. Bidders must visit the location of the work in person.

The Board of Water Commissioners reserves the right to reject any or all proposals, or to accept any proposal, should the Board deem it to be for the interests of the city of New Britain so to do.

THOMAS S. HALL, Chairman,
P. J. EGAN,
H. D. HUMPHREY,
Board of Water Commissioners.
PERCY M. BLAKE,
New Britain, Conn., Chief Engineer.
November 17, 1897. 47-2t

STREET LIGHTING.

BINGHAMTON, N. Y.

Sealed proposals will be received by the City of Binghamton, N. Y., up to December 20 1897, at 7:30 p. m. for lighting the city with 175 or more naphtha lamps, every night in the year from dusk until daylight, the city to furnish and set lamp posts, the contractor to furnish lamps, supplies, and care for same. Bids to be for one, two and three year contract and to name price for ordinary naphtha burner and Welsbach burner. Contractor shall guarantee ordinary burner to furnish light of twenty-five candle-power; Welsbach burner seventy-five candle power. All proposals shall be directed to Burr W. Mosher, City Clerk, and shall be marked "Proposals for Lighting." The City reserves the right to reject any or all bids. The city also reserves the right, in case it establishes a municipal lighting plant, to terminate the naphtha lighting contract on sixty days' notice.

48-2t BURR W. MOSHER, City Clerk.

SEWERS.

OFFICE OF CITY CLERK,
ASHTABULA, O., Nov. 23, 1897.

Sealed proposals will be received at the above mentioned office up to 12 o'clock, noon, Saturday, December 11, 1897, for furnishing labor and material for constructing a sewer in Russell Street in said city.

Lineal length of sewer, about 822 feet 8-inch pipe sewer.

For further information address the City Clerk.

By order of Council.

48-1t A. B. PHILLIPS, City Clerk.

GRADING, SURFACING AND STONE FILLING.

THE SHORE ROAD COMMISSION,
ROOM NO. 1, CITY HALL,
BROOKLYN, November 27, 1897.

Sealed proposals will be received by the Shore Road Commission at its office until Thursday, December 9, at 5 p. m., when said proposals will be opened and announced for work to be done under "The Shore Road Construction Plan No. 3 from Bay Ridge Ave. northerly to First Ave.," including maintenance, watering and cleaning for a period of one year, after the final acceptance of the work, in accordance with the plans and specifications on file at the office of the engineer in charge, Edwin C. Sweezey, Third Avenue and Thirty-ninth Street, Brooklyn.

Proposals must be in writing on the blank form for proposals furnished by the engineer, and must be accompanied by a certified check for one thousand dollars ($1,000) drawn payable to the order of the Commission, to be returned to the bidder in case his bid is rejected by "The Shore Road Commission." In case the party or parties to whom the contract may be awarded shall neglect or refuse to enter into contract, the amount deposited as above specified will be retained as liquidated damages for such neglect or refusal.

The right to reject any and all proposals is reserved by the Commission.

A corporate bond will be required from the successful bidder for the faithful performance of his contract. Proposals to be directed to The Shore Road Commission, and indorsed "Proposals for work to be done under Construction Plan No. 3."

ELIJAH R. KENNEDY, President.
GEORGE INGRAM, Secretary. 48-1t

For Other Proposals see Page XXVI.

SANITARY DISTRICT OF CHICAGO.

TO CONTRACTORS.

SEALED PROPOSALS ADDRESSED TO THE BOARD OF TRUSTEES OF THE SANITARY DISTRICT OF CHICAGO AND INDORSED.

"Proposals for Supplying and Erecting Certain Bridge Superstructures Along the Line of the Main Drainage Canal" will be received by the clerk of the said sanitary district at Room 1110 Security Building, Chicago, Illinois, until 12 m. (standard time), of Wednesday, the 22d day of December, A. D. 1897, and will be publicly opened by said Board of Trustees at the regular meeting held that day, or at a special meeting held for that purpose.

The bridges for which said tenders are invited are three (3) in number, and their sites are as follows:

Pittsburg, Cincinnati, Chicago & St. Louis Railway Company, Chicago and Northern Pacific Railroad Company, and the Union Stock Yards and Transit Company's bridge on Contract Section O, near Campbell avenue.

Atchison, Topeka and Santa Fe Railway Company's bridge at west end of Contract Section N.

Atchison, Topeka and Santa Fe Railway Company's bridge, near the east end of Contract Section G.

The work for which said tenders are invited includes the supplying of all materials for the superstructures of said bridges, and the erection and completion of the same, according to plans and specifications furnished by the Sanitary District of Chicago, unless a competitive plan submitted shall prove, in the opinion of the chief engineer of said district, more acceptable and economical. Competitive plans, accompanied by bids formed upon such plans, are solicited. Such plans must conform to the specifications furnished by the district, as to strength and quality of materials and workmanship. All competitive plans must be accompanied by a certificate from the interested railroad that the design, if adopted by the district, will be acceptable to such railroad company.

Each bridge will be treated as a single contract in canvassing proposals and making awards.

Bids for the P., C., C. and St. L. Ry. Co., C., and N. P. R. R. Co., and U. S. Y. and T. Ry. Co.'s bridge must be accompanied by a certified check or cash to the amount of five thousand ($5,000) dollars.

Bids for the Atchison, Topeka and Santa Fe Railway Co.'s bridges must be accompanied by a certified check or cash to the amount of three thousand ($3,000) dollars for each bridge.

All certified checks must be drawn on some responsible bank doing business in the city of Chicago, and be made payable to the order of the Clerk of the Sanitary District of Chicago. Said amounts of five thousand ($5,000) dollars or three thousand ($3,000) dollars respectively will be held by the Sanitary District until all of said bids have been canvassed and the contract awarded and signed, the return of said check or cash being conditioned upon any bidder to whom the award of said work may be made, appearing within ten (10) days after notice of such award being given, with bondsmen, and executing a contract with the Sanitary District for the work so awarded and giving a bond satisfactory to the said Board of Trustees for the fulfillment of the contract for the superstructure of the P., C., C. and St. L. Ry. Co., the C. and N. P. R. R. Co., and the U. S. Y. and T. Co. bridge in the amount of forty thousand ($40,000) dollars, and of the contract for superstructures of the Atchison, Topeka and Santa Fe Railway Co.'s bridges in the amount of twenty thousand ($20,000) dollars for each bridge.

All bids must be upon the blank forms furnished by the Sanitary District.

No bid will be considered unless the party making it shall furnish evidence satisfactory to the Board of Trustees of his experience and ability in this class of work, and that he can control sufficient capital to enable him successfully to prosecute the same in case the contract therefor shall be awarded him.

Bidders are required to state in their bids their individual names and places of residence in full.

Specifications and plans may be obtained at the office of the Chief Engineer, Room 1010 Security Building, Chicago, Illinois, on or after December 1, 1897.

The said Board of Trustees reserves the right to reject any and all bids.

THE SANITARY DISTRICT OF CHICAGO,
By THOMAS KELLY,
President of its Board of Trustees.
Attest: JAMES REDDICK, Clerk.
Chicago, Oct. 19, 1897. 45-4t

U. S. ENGINEER OFFICE, 1637 Indiana Ave., Chicago, Ill., Nov. 11, 1897.—Sealed proposals in triplicate, for design, manufacture and erection of superstructure of five steel highway BRIDGES across line of Illinois and Mississippi Canal, between Bureau and Wyanet, Ill., will be received here until 12 noon, Central time, December 20, 1897, and then publicly opened. Information furnished on application here or to Assistant Engineer JAMES C. LONG, Tiskilwa, Ill. W. L. MARSHALL, Maj., Engrs. 46-4t

U. S. ENGINEER OFFICE, Burke Building, Seattle, Wash., Nov. 8, 1897.—Sealed proposals for furnishing 500,000 tons of STONE and other materials for construction of JETTY at GRAYS HARBOR, WASH., will be received here until 2 p. m., Dec. 10, 1897, and then publicly opened. Information furnished on application. HARRY TAYLOR, Capt., Engrs. 46-3t

U. S. ENGINEER OFFICE, Montgomery, Ala., November 18, 1897.—Sealed proposals in triplicate for dredging at entrance to Pensacola Bay, Fla., will be received here until 12 o'clock noon, December 13, 1897, and then publicly opened. Information furnished on application. F. A. MAHAN, Major Engrs. 47-3t

THE SCHOEN PRESSED STEEL CO., Allegheny, Pa., has just closed a contract for 1,000 steel cars for the Pittsburg, Bessemer & Lake Erie R. R. The cars, which will be used to carry ore from the lake region as well as coal, weigh about 34,000 lbs., each, and have a carrying capacity of 100,000 lbs.

THE CATARACT CONSTRUCTION CO., and the Cataract Power & Conduit Co., of Niagara Falls, N. Y., have made arrangements for supplying a greater quantity of electric power to the city of Buffalo. The Buffalo Ry. Co. has applied for more power and two new elevators are to use power from Niagara Falls.

THE WESTINGHOUSE ELECTRIC & MFG. CO., Pittsburg, Pa., is reported to have been awarded a contract for furnishing the city of Detroit, Mich., with a new dynamo for the electric lighting plant, at $2,125. The company has also shipped a new 1,500-light dynamo to the Beacon Electric Co., Lansingburgh, N. Y.

THE PENNSYLVANIA TUBE WORKS CO., Pittsburg, Pa., is reported to have completed negotiations for the purchase of the property of John Robson & Son, chain manufacturers, adjoining its own plant, for $80,000, and will, as soon as possible, commence the erection of a large warehouse, on the newly acquired property.

THE DUCKER PORTABLE HOUSE CO., 26 Cortlandt St., New York, was said in our issue of of Nov. 18 to have recently secured a contract for 500 of its portable houses for use in the Klondike. The dimensions of these houses should have been given as 8 ft. 3 ins. square. When packed ready for transportation each occupies a space of 34 cu. ft.

MR. DAVID SHULDINER, 961 Sixth Ave., New York, has contracts to furnish the glass for a number of new office buildings in that city, including the Washington Life Building, Liberty St. and Broadway; Cushman Building, Maiden Lane and Broadway; New York Life Building, Leonard St. and Broadway, and buildings at 584 to 596 and at 830 Broadway.

FLETCHER & HARRISON, New York, have received the contract to build a new river steamer for the New York & Hudson Steamboat Co., to take the place of the wrecked "Catskill" of that line. The new boat will be about the same size as its predecessor, will have a steel hull and is reported as to cost about $130,000. It will be built at Wilmington, Del.

MR. L. K. HIRSCH, 549 The Rookery, Chicago, has recently sold to a western railway new steel rails for over 40 miles of track, and rails for 25 miles of new track in the southwest. He reports a decided improvement in the demand for new steel, as well as in relaying rails, and advises that he has recently completed a trade with a steel company of scrap for a large quantity of new steel rails, which he is placing on the market.

THE EAST CHICAGO TANK & BOILER WORKS, East Chicago, Ind., has given notice of the sale of its plant at that place, Dec. 10, through Mr. George W. Lewis, Receiver. The sale will include all the real estate, buildings and machinery, and will go to the highest bidder; but no bid will be received of less than $1,000, subject to the mortgage indebtedness of $5,000. A certified check of $250 will be required from all bidders as an evidence of good faith.

THE DETROIT GRAPHITE MFG. CO., Detroit, Mich., has purchased new machinery, and has enlarged its plant during the past year until it now has a capacity of 30 bbls. daily. Mr. A. A. Boutell, Vice-Pres. and Gen. Mgr., advises our representative that many of the leading engineers and architects are now specifying Superior graphite paint, and also that many officials of large bridge and structural works and railways, who a few years ago reluctantly permitted the use of this paint, are now using it.

THE FINANCE & CONSTRUCTION CO., San Francisco and Sacramento, Cal., has been incorporated, according to report, with $500,000 capital stock, to install electrical machinery. The company is formed by leading electrical manufacturing companies of the Pacific coast, who have decided to unite their forces on this branch of the electrical business, as none of them has sufficient work to keep its men engaged all the time. The officers will be: Pres. and Mgr., C. S. Young; Vice-Pres., J. A. Lighthipe; Secy., Geo. P. Low; Supt. of Constn., C. E. Dutcher, and Attorney, Col. E. F. Preston.

THE AMERICAN DIAMOND ROCK DRILL CO., 120 Liberty St., New York, reports the following among recent sales of diamond prospecting drills: A machine of 1,500 ft. capacity to London, one of 3,000 ft. capacity to Georgia, four hand power drills to the Nicaragua Canal Commission, one hand power drill to the New Harlem River bridge, and one 3,000-ft. machine to Chili, South America. The company is also putting down under contract the test borings for the New East River Tunnel, between New York and Brooklyn, and has already bored several holes in the latter city and in Maiden Lane, New York, on this contract.

ing armature 48-pole machines, of 300 K-W. each at 150 revolutions, and will be separately excited. They will take the place of a considerable number of smaller machines and will be used to furnish current to an extensive system of secondary mains fed from large transformers.

MR. J. E. LAMBIE, President, and Mr. V. A. Dodge, Secretary of the New York Export & Import Co., have recently started on their fifth annual trip to India, China and Japan. The company represents the National Tube Works Co., Park Bros. & Co., U. S. Leather Co., Cumberland Iron & Steel Co., Joseph Dixon Crucible Co., Mossberg & Granville Mfg. Co., and many others. The company is said to be figuring on nine miles of standard section rails for Japan and also on an ice-making plant of five tons daily capacity for the same market. It made recently a shipment of 16 tons of cut nails to that country.

MR. WILLIS SHAW, Chicago, Ill., dealer in contractors' machinery, reports the following recent sales: 75-HP. double drum mining hoist, to J. D. Hardin, Deadwood, S. Dak.; quarry machinery to the Mitchell Lime Co., Mitchell, Ind.; 80-HP. air compressor to the Minneapolis, St. Paul & Sault Ste. Marie Ry., Minneapolis, Minn.; hoisting machinery to the Cleveland, Cincinnati, Chicago & St. Louis Ry., at Ludlow Falls, O.; steam tug to James Stewart & Co., St. Louis, Mo.; two locomotives and an equipment of Shaw dump cars to Vandegrift & Jacobs, for use on the Duluth & Iron Range R. R.; 75-HP. mining hoist for the Great Eastern Gold Mining Co., Deadwood, S. Dak.; 50-ton steam shovel to the Marion Brick Works, Marion, Ind., and a carload of hoisting engines to Major B. M. Harrod, of the New Orleans Drainage Commission.

THE MICHIGAN BRASS & IRON WORKS, Detroit, Mich., has recently made a shipment of heavy valves to a western mining company, and is busy at present in all departments. The company has orders for a large number of extra heavy valves for the water-works at St. Louis, Mo., including sizes from 8 to 36 ins., and also orders for 36-in. and 42-in. valves for use in connection with the new Worthington pump now being installed at the Chicago water-works. Mr. Frank B. Ward, Secy. and Gen. Mgr., has made a number of important changes and additions to the plant recently, among them being the complete reconstruction of the engine room, the purchase of a 72-in. Universal radial drill from the Niles Tool Works Co., Hamilton, O., and he has recently placed an order with the same company for a 10 × 16-ft. boring. There has been an increase in the calls for prices, and several inquiries have recently been received from England, Borneo and Johannesburg, South Africa.

McINTOSH, SEYMOUR & CO., Auburn, N. Y., have lately received the following contracts: Georgia Electric Light Co., Atlanta, Ga., one 900-HP. horizontal tandem compound engine, arranged for a direct-driven generator, for railway work; Pueblo Electric St. Ry. Co., Pueblo, Colo., three horizontal tandem comp. direct-connected engines, one for driving a 250 K-W. alternator, the other two each for 225 K-W. railway generators; the New York & Staten Island Electric Co., Livingston (S. I.), N. Y., two vertical cross compound engines, each for direct-driving 400 K-W. lighting alternators; the Arbuckle Sugar Refinery Co., Brooklyn, N. Y., three 450-HP. horizontal cylinder engines and one of 225-HP. The Edison Illuminating Co., Brooklyn, N. Y., has placed in operation a 3,000-HP. horizontal double tandem compound engine, made by this company, which is direct coupled to a 2,000-K-W. dynamo. Among foreign orders they are building engines for Ireland, Java, Ceylon, Buenos Ayres, Japan and other countries.

NEW COMPANIES.—New York & Pennsylvania Engineering Co., Waverley, N. Y.; $1,000; Edward L. Smith, Towanda, Pa.; Frank A. Gilette, Athens, Pa.; Frank A. Bell and Ambrose G. Ward, of Waverley.

S. Flory Mfg. Co., Bangor, Pa.; $10,000, commencing with $10,000; to manufacture iron and steel; Treas., John H. Werner.

Acetylene Gas Construction Co., Atlantic City, N. J.; $50,000, commencing with $2,000; to manufacture and sell the "Gem" acetylene gas machine, etc.; John J. Rochford, Alfred W. Bailey and James Monroe, Atlantic City, N. J.

Steam Engine Improvement Co., Philadelphia, Pa.; $100,000, commencing with $50; to manufacture iron and steel, and other metals of commerce; W. I. Girling, J. J. Torpey, O. D. McClellan, Robert Cunningham and H. S. J. Brady, all of Philadelphia.

New Bicycle Co., New York; $500,000, commencing with $50; to do a general bicycle business; John La Burt, Jamaica (L. I), N. Y.; K. A. Beekman, C. J. Pihl and others, of Brooklyn.

West Virginia Torpedo & Powder Co., Sisterville, W. Va.; $50,000, commencing with $25; to manufacture nitroglycerine and other high explosives; J. C. Callahan, Oakdale, Pa.; William O'Brien, McDonald, Pa.; H. M. Spear, Avalon, Pa.; W. W. Van Winkle and Robert Alexander, Parkersburg, W. Va.

New England Transportation & Colonization Co., Boston, Mass.; $1,000,000, commencing with $50; to construct steamboats, etc.; F. D. Gallupe and Geo. P. Ayres, F. W. Litchfield and Chas. H. Snow, all of Boston; E. B. Manaton, Webster, Mass.

Alaska Transportation, Trading, Mining & Manufacturing Co., Philadelphia, Pa.; $150,000, commencing with $200; to construct, repair, purchase, lease and operate any kind of sea-faring craft, engine, etc.; Wm. D. P. Alms, Jr., H. K. Messick, W. S. Ambler and H. W. Lahmeyer, Philadelphia; A. L. Anderson, Camden, N. J.

Niagara Carbon Co., East Orange, N. J.; $400,000, commencing with $200,000; to manufacture carbon for industrial purposes, etc.; Cecil L. Saunders and Fred. W. A. Lippert, North Tonawanda, N. Y.; Howard K. Wood, East Orange, N. J.

Louis Costa Jr. Co., Camden, N. J.; $50,000, commencing with $10,000; to manufacture and sell electro-dental and surgical appliances, etc.; Louis Costa, Jr., Henry C. Register and A. William Schramm, all of Philadelphia, Pa.; C. Harris, Cinnaminson, N. J.

W. D. Adams & Co., New York, N. Y.; $5,000; to manufacture engineering supplies; Clarence L. Lowther, Brooklyn; William D. Adams and Ephrain S. Richardson, New York.

Brownley Mfg. Co., New York, N. Y.; $50,000; to make patent steam boiler injectors and machinists' supplies; William J. McQueen, 319 East 149th St.; Julius C. Drucklieb and John L. Thomas, New York.

National Sanitary Supply Co., New York, N. Y.; $100,000; to manufacture sewer gas traps and disinfecting apparatus; Drew W. Hageman, Belleville, N. J.; Edward F. Kinsey, Newark, N. J.; Albert L. Hall, W. H. Van Steenbergh and George S. Willis, New York.

Port Jervis Telephone Co., Port Jervis, N. Y.; $4,000; to operate a telephone system in and between Port Jervis and Deerpark; John P. Van Etten, Conashaugh, Pa.; William L. Cuddeback, Moses Dupuy, Samuel H. Gariss, J. Wallace Gordon, Fred Mason, William A. Parshall, Charles P. Reuling, William E. Scott, John T. Van Etten and Philip G. Wagner, all of Port Jervis.

B. L. Berkey Engineering Co., Denver, Colo.; $25,000; to do a general contracting business; Ben L. Berkey, Lyndon H. Wheeler and Franklin R. Wallace.

Weir Filter Co., New York, N. Y.; $100,000; directors, John T. Cutting and Bryce Metcalf, Rosebank (S. I.), N. Y.; Regis H. Post, Bayport (L. I.), N. Y.; Charles H. Squire, Port Richmond (S. I.), N. Y.; Henry Appleton, New York.

Groat Car Tender Co., San Francisco, Cal.; $500,000, all paid in; to make and sell the Silas Groat patent tender, etc.; Silas Groat, San Luis Obispo, Cal.; Charles W. Fay, Philip S. Fay and Thomas Mahoney, San Francisco; N. W. Spalding, Oakland, Cal.

New York Compound Engine Co., Jersey City, N. J.; $100,000; to manufacture machinery for ships and steamers invented by Frank S. Rose; Judge George W. DeMeza, of Plainfield, N. J.; Frank S. Rose, George B. Townsend and Peter Snyder, of New York.

Berger Bros. & Co., Philadelphia, Pa.; $90,000; commencing with $9,000; to manufacture iron and steel; Treas., Geo. B. Geiser, 2130 North 32½ St.

Safety Conduct Co., Pittsburg, Pa.; $10,000, commencing with $1,000; to manufacture and sell lubricated electrical articles manufactured from iron and steel; Treas., Robert Garland, Wilkinsburg, Pa.

Klondike Snow Locomotive Co., Rutherford, N. J.; $125,000, commencing with $1,000; to manufacture all kinds of vehicles to be propelled by steam, etc.; Chas. C. Emerson and Geo. K. Thomas, Rutherford; Howard E. Foxall, Brooklyn, N. Y.

Reading Car Wheel Co., Reading, Pa.; $50,000, commencing with $5,000; to manufacture iron and steel; Treas., Chas. H. Buback, Reading.

Western Enamel Brick Co., St. Louis, Mo.; $50,000, commencing with $2,500; to deal in building materials; A. C. Wolfe, Freeport, Pa.; Geo. T. Walker, St. Joseph, Mo.; J. H. Havighorst, Guthrie, Okla.; F. M. Beale, Newkirk, Okla.; Mrs. C. F. Wolfe, Freeport, Pa.

Parkin Mfg. Co., Philadelphia, Pa.; $100,000, commencing with $600; to manufacture and deal in pulleys, electric switches, etc.; Jos. W. Parkin, H. D. Booth, Charles Thackara, W. F. Duffield and F. S. Brown, all of Philadelphia.

Philip Anns Co., Philadelphia, Pa.; $10,000, commencing with $1,000; to erect bridges and iron and steel structures; Treas., Walter L. Lewis, 1909 Green St.

CONTRACT PRICES.

FURNISHING AND LAYING WATER MAINS.—New York, N. Y.—The following bids were received by the department of public works Nov. 24 for furnishing, delivering and laying water mains in 11th Ave. and Boulevard, from 179th to 59th Sts.; in 179th St., between Amsterdam and 11th Aves.; and in Elm St., between Great Jones and Chambers Sts.; the work to be completed within 300 days:

BIDS RECEIVED NOV. 24, AT NEW YORK, N.Y., FOR FURNISHING AND LAYING WATER MAINS.

Quantities.	M. J. Dady, B'klyn, N. Y.	T. A. Gillespie Co., Pisbrg, 26 Cortlandt St.	Wm. P. Baird, 339 East 63d St.	Norton & Dalton, 147 East 125th St.	Thielmann & Smith, 411 Lenox Ave.	Manhattan Constn. Co., 11 B'way.	Jos. W. Cody Co., 111th St. & Boulevard.	M. Lipps, Beekman Ave. & Beech Terrace.	John Cornwell, Jr., 69 E. 127th St.	George Feuh, Brooklyn, N.Y.	Shanley & Ryan, 26 Tompkins St.	Nat'l Contrctg Co., 11 B'way.
Rock excavation, without blasting ..... 100 cu. yds.	$5.00	$3.50	$0.67	$5.00	$4.00	$5.00	$5.00	$8.00	$2.00	$7.00	$5.00	$8.00
Rock excavation ..... 10,000 " "	2.37	1.90	.67	2.50	.45	1.00	2.00	3.85	2.00	2.90	2.47	2.40
Earth excavation ..... 54,000 " "	.28	.25	.67	.25	.45	.50	.30	.45	.18	.42	.27	.28
Filling ..... 50,000 " "	.17	.17	.13	.10	.45	.30	.10	.25	.08	.12	.21	.16
Furnishing and delivering straight pipe.... 8,200 tons....	18.75	18.30	19.00	18.25	19.50	20.00	18.50	18.60	21.00	19.25	18.50	19.80
All branches ..... 160 " ...	45.00	41.50	40.00	45.00	45.00	50.00	40.00	40.00	42.00	41.50	38.00	40.00
Laying 36-in. pipe ..... 40,000 lin. ft..	.70	.65	.73	.87	.80	.60	1.00	.70	1.00	.75	.75	.97
" 20-in. " ..... 600 " "	.65	.40	.43	.55	.70	.60	.50	.40	.40	.45	.35	.68
" 12-in. " ..... 2,000 " "	.35	.25	.30	.25	.30	.30	.30	.25	.30	.30	.25	.28
" 6-in. " ..... 1,000 " "	.30	.20	.32	.20	.20	.22	.20	.15	.20	.20	.18	.18
Furnishing, laying and setting:												
36-in. stop-cock and gearing ..... 7 each...	450.00	450.00	500.00	425.00	600.00	400.00	4.00	425.00	500.00	650.00	475.00	500.00
20-in. " " " ..... 3 " ...	150.00	120.00	200.00	120.00	200.00	100.00	128.00	150.00	200.00	300.00	150.00	200.00
12-in. " " box ..... 30 " ...	37.00	37.50	40.00	35.00	50.00	50.00	37.00	45.00	60.00	125.00	40.00	50.00
6-in. " " " ..... 40 " ...	25.00	23.00	25.00	25.00	40.00	50.00	24.00	25.00	35.00	75.00	25.00	25.00
Double-nozzle case hydrants ..... 30 " ...	50.00	48.00	63.00	48.00	50.00	45.00	52.00	50.00	75.00	60.00	50.00	46.00
Brick work ..... 150 cu. yds.	12.00	10.00	9.00	10.00	12.00	11.00	12.00	7.00	10.00	10.00	10.00	10.00
Concrete ..... 50 " "	7.00	4.25	4.50	4.50	4.00	6.00	4.00	5.00	3.00	7.00	5.00	7.50
Replacing asphalt pavement ..... 8,000 sq. yds.	4.00	4.00	3.85	3.85	4.00	4.00	4.00	4.50	5.00	3.50	4.00	3.81
Relaying pavement and flagging ..... 3,000 " "	.45	.21	.35	.40	.30	.50	.45	.45	.20	.20	.45	.25
Relaying granite pavement ..... 300 " "	2.00	1.35	1.25	1.00	1.50	1.00	1.25	1.50	.60	4.00	1.00	1.10
Replacing Telford macadam pavement..... 12,000 " "	.50	.70	.25	.20	.60	.25	.75	.45	.30	.85	.60	.50
Resetting curb and gutters ..... 500 lin. ft..	.15	.21	.05	.10	.10	.10	.10	.01	.01	.10	.15	.15
Furnishing, laying and setting blow-offs.. 8 each...	12.00	20.00	10.00	10.00	10.00	50.00	60.00	25.00	25.00	50.00	10.00	27.00
Total	$287,641	$275,397	$287,020	$280,060	$304,100	$296,830	$292,960	$316,490	$309,665	$310,240	$289,180	$304,334

THE GENERAL ELECTRIC CO., Schenectady, N. Y., during the months of June, July and August received orders for 278 generators, aggregating nearly 14,000 K-W., for lighting purposes. The New Omaha Thomson-Houston Electric Light Co., Omaha, Neb., is undertaking the concentration of its station and has placed an order with the General Electric Co. for three monocyclic alternators, each to be direct connected to a McIntosh, Seymour & Co. compound condensing engine. These alternators will be revolv-

Chilkoot Pass Transportation Co., New York; $1,200,000, commencing with $125; to construct and operate railways, tramways, etc.; S. S. Bushland, E. T. Halsey, Louisville, Ky.; Chas. D. Lanier, C. C. Overton and Attilla Cox, New York.

Columbia Navigation Co., Charleston, W. Va.; $1,000,000, commencing with $50; to construct and operate railways, etc.; W. E. Chilton, J. E. Chilton, G. O. Chilton, Henry Fry and H. B. White, Charleston, W. Va.

ASPHALT AND CEMENT PAVING.—Washington, D. C.—The following bids were received by the department of justice Nov. 22 for 800 sq. yds. of asphalt and 580 sq. yds. of cement paving around the jail in this city, all local bidders: (1) being for asphalt; (2) for cement. Augustus Lapreaux (2), 54 cts. a sq. yd.; James O'Dea (2), 78 cts.; John J. Shipman (2), 94 cts.; J. P. Smith (2), 95 cts.; Fred Drew (2), $1.08; Cranford Paving Co. (1), $1.90, (2) $1.25; Barber Asphalt Paving Co. (1), $2.

The Circulation of ENGINEERING NEWS among Prominent Contractors Probably EXCEEDS that of any other FIVE PAPERS.

ADVERTISE YOUR WORK IN ENGINEERING NEWS.

CENTRAL FIREPROOFING COMPANY,
Manufacturers and Contractors for Erection of Hollow Tile and Porous Terra Cotta . . **FIREPROOFING**
No. 874 BROADWAY, NEW YORK. Henry M. Keasbey, President.

THE EXPANDED METAL

SYSTEM OF FIRE-PROOFING covers a construction of light concrete floors with imbedded sheets of heavy metal insuring strength for any requirement

EXPANDED METAL STEEL PLASTERING LATH

Is the standard metal lath in all markets. Used by the United States Government and all first-class architects throughout the world.

Write for illustrated book containing full information, free by mail.

Northwestern Expanded Metal Co.,	Chicago	New York Expanded Metal Co.,	New York
Central Expanded Metal Co.,	Pittsburgh	Southern Expanded Metal Co.,	Washington
Eastern Expanded Metal Co.,	Boston	Expanded Metal Fireproofing Co.,	Chicago
Manhattan Concrete Co.,	New York	Merritt & Company,	Philadelphia

Metropolitan Fire-Proofing Company,

FLOORS, PARTITIONS, COLUMN PROTECTION.

This system combines Strength and Stiffness, Durability and Lightness combined with Great Resistance to Injury by Fire and to Transmission of Heat. It is the Lightest Floor on the Market, and the only practicable Floor which effectually protects the Beams from injury by fire.

Numerous public tests have proven all that we claim for it. It is in use in many of the largest buildings in New York, Philadelphia, Boston and other places.

MAIN OFFICE, TRENTON, N. J.
NEW YORK OFFICE, 874 BROADWAY.
BOSTON OFFICE, 166 DEVONSHIRE ST.

REFERENCE,
COOPER, HEWITT & CO., 17 Burling Slip, New York.

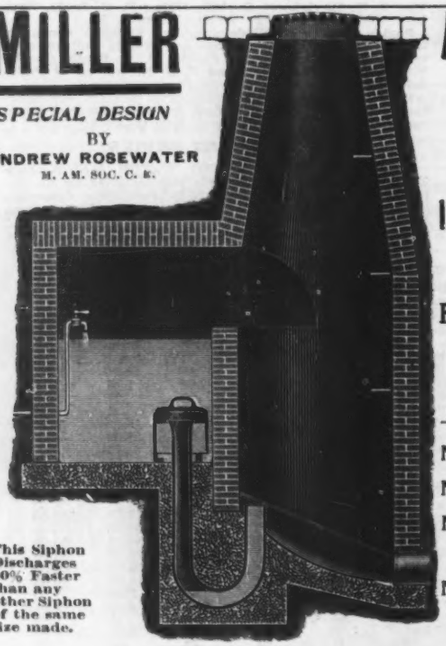
MANHATTAN CONCRETE CO.

...Engineers and Contractors...

HIGH-GRADE CONCRETE ...Of Every Description... **156 Fifth Avenue,** NEW YORK CITY.

MILLER AUTOMATIC SIPHON

SPECIAL DESIGN
BY
ANDREW ROSEWATER
M. AM. SOC. C. E.



This Siphon Discharges 40% Faster than any other Siphon of the same size made.

—FOR—

INTERMITTENT FLUSH TANKS.

For Flushing Street Sewers and for Sub-Soil Irrigation.

No Moving Parts.
No Valves.
No Small Tubes to Clog or Choke.
Nothing Whatever to Get Out of Order.

SEE NEXT WEEK FOR STANDARD DESIGN.

Received Highest Award at World's Columbian Exposition of 1893 for

SIMPLICITY OF CONSTRUCTION, EFFICIENCY AND RELIABILITY.

We guarantee every Siphon to be absolutely reliable, no matter how small the supply stream may be.

MANUFACTURED BY

PACIFIC FLUSH TANK CO.,

84 LA SALLE STREET, CHICAGO.
Canadian Agency, 39 D'Arcy Street, Toronto. Write for Catalogue and Prices.

THE **PELTON WATER WHEEL**

is known the world over as affording the most simple, reliable and economical power for all purposes.

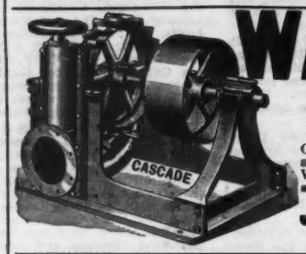
7000 Wheels Now Running,

filling every condition of service in a most efficient and satisfactory way.

Electric Power Transmission.

Pelton Wheels are especially adapted to this purpose and are operating the majority of stations of this character in all parts of the world. Highest efficiency and best regulation guaranteed. Catalogues furnished on application.

PELTON WATER WHEEL COMPANY,
143 Liberty St., New York, N.Y., U.S.A.,
Or 121-123 Main St., San Francisco, Cal., U.S.A



WATER WHEEL

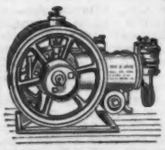
ADAPTED TO ALL HEADS FROM **3 FEET TO 2000 FEET.**

Our experience of 35 years building Water Wheels enables us to suit every requirement of Water Power Plants. We guarantee satisfaction. **Send for a Pamphlet, state Head, and write full particulars.**

JAMES LEFFEL & CO.
SPRINGFIELD, OHIO, U. S. A.

WATER MOTORS.

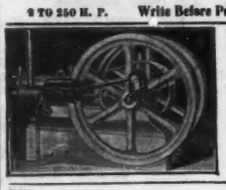
THE BACKUS MOTOR is the cheapest power known for driving all kinds of light machinery. Water Companies advise the Backus. It stands without an equal. Also Gas and Gasoline Engines. Agents wanted. Send for special circular to
BACKUS WATER MOTOR CO., Newark N. J.



THE MIETZ & WEISS Gas and Kerosene Engines

The most economical, simplest and most reliable power known. Runs on common kerosene, 150° test, without igniter. Perfectly safe.
Patented 1897, U. S. and Foreign Countries.
128-138 MOTT STREET, NEW YORK.

FOOS Gas and Gasoline Engines EXCEL ALL OTHERS IN DESIRABLE FEATURES.
Adapted for ALL Power Purposes—Electric Lighting, Milling, Mining, Water Works, Elevators, Factories, etc. Cheaper and better than Steam.
2 TO 250 H. P. Write Before Purchasing. FOOS GAS ENGINE CO., Springfield, O.



OLIN GAS AND GASOLENE ENGINES

For Water-Works, Electric Lighting and Power Purposes.

Described in Engineering News, April 15th, 1897.

OLIN GAS ENGINE CO.,
10 to 16 LOCK STREET BUFFALO, N. Y

Ericsson : Swedish : Telephones

AWARDED SIX FIRST PRIZES.

Ericsson Transmitters are the **MOST ECONOMICAL INSTRUMENTS** on the Market. We make a Specialty of INTERIOR SYSTEMS. Estimates Cheerfully Furnished.

COMPLETE EXCHANGES EQUIPPED.

WILSON-BATES ELEC. CO., Sole Metropolitan Agents. **136 Liberty Street, New York.**

Monmouth Mound and Manufacturing Company

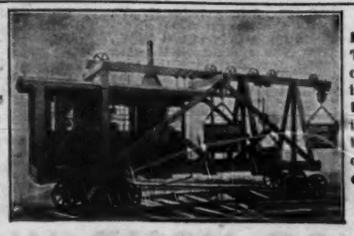
WM. HANNA, Prest.
J. R. HANNA, Vice Prest.
C. C. MERRIDITH, Secy & Treas.

All Sizes INCLUDING 30 IN. MONMOUTH, ILL. Also 27 IN.

JOHN H. JACKSON, Successor to Jackson Bros. - - - - Established 1852.
New York State Drain Tile and Pipe Works, Main Office, 117 THIRD AVE., ALBANY, N. Y.

Manufacturer of and Dealer in Agricultural Drain Tile, Salt-Glazed Sewer Pipe, Red Pressed Brick, Mortar Colors, Fire Brick, Oven Tile, Chimney and Flue Lining, Chimney Tops, Fire Clay Stove Pipe, Fire Clay Kaolin, Encaustic Sidewalk Tile, Rosendale and Portland Cement, Lime, Plaster, etc.

THE JACKSON HOISTER AND CONVEYOR



For Excavating and Refilling all kinds of Trenches. Three sizes, to carry 2, 3 or 4 buckets holding 10, 18, or 27 cu. ft. each. Requires only one man to run it. Car is self propelled. Each bucket independent of the other. Ask us more about it.

GEO. D. GRANNIS,
Grand Opera House,
Syracuse, N. Y.

Su

PERSO
Obitu
ENGIN
Comi
NEW
Trade
CONST
Cond
Railw
Stree
Elect
Bridg
Build
Wate
Irriga
Sewe
Garba
Stree
Manu
Gas P
Misce
Contr
INDUS

Mr. J
of Mar
Mr. J
and ele
Mr. C
urer of
Col.
elected
York.
Mr.
mission
Europe
Mr. C
Pittsbu
Johnso
Mr.
skine
Ry., C
Mr.
F. H.
coln R
Mr. H
Pittsbu
at Gre
Mr.
merly
E., of
Commi
Mr. I
& Nort
reports
in the
Mr. J
the U.
been de
mission
of the
Mr. J
Eastern
ager as
burg &
the lat
Prof.
cently
mission
Harbor
delphia
departu
Messr
of Chic
Chief E
Mass.,
Mr. JA
pert by
York c
for the
city.
Mr. E
of Part
pose o
Maryla
vestiga
special
works
states.
facture
The
C. W.
Alfred
have t
which
rection
Disch
Haskell
Engine
Harris
F. Dos
Mr. Ge
veys to
Divisio
Engine